DRINKING WATER BOARD
PACKET

NOVEMBER 16, 2007

SALT LAKE CITY, UTAH

AGENDA

FOR THE

DRINKING WATER BOARD
AND
WATER QUALITY BOARD

JOINT BOARD MEETING

ON

NOVEMBER 16, 2007

State of Utah

Department of
Environmental Quality

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Richard W. Sprott
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

DRINKING WATER BOARD
and
WATER QUALITY BOARD
JOINT WORK MEETING

November 16, 2007

Place: Department of Environmental Quality
168 North 1950 West, Room 101
Salt Lake City, Utah 84116
Phone: (801) 536-4200

9:00 – 9:10	1.	Welcome and Introductions - Joe Piccolo, Water Quality Board Chairman
9:10 – 9:30	2.	Division Reports - Walt Baker and Ken Bousfield
9:30 – 10:00	3.	SRF Funding Issues, Perspective of DDW and DWQ - Ken Wilde and Ed Macauley
10:00 – 10:30	4.	Working with Local Land Use Authorities to Improve Water Protection - Kate Johnson, Bill Damery and Carl Adams
10:30 – 10:45	5.	Break
10:45 – 11:15	6.	Defining Roles and Enhancing Collaboration Between Agencies on Classification, Assessment and Permitting Activities for Class I Waters - Ying Ying Macauley
11:15 – 11:40	7.	Kennecott's South End Ground Water Permits and Remedial Activities - Dan Hall

Noon - 1:00	8.	Break for Lunch
1:00	9.	Separate for the two Board Meetings: Drinking Water Board - Room 201 Water Quality Board - Room 101

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Brooke Baker, Office of Human Resources, at (801) 536-4412, TDD (801) 536-4413, at least five working days prior to the scheduled meeting.

AGENDA

FOR THE

DRINKING WATER BOARD MEETING

ON

NOVEMBER 16, 2007

State of Utah

Department of Environmental Quality

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Richard W. Sprott
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

DRINKING WATER BOARD MEETING

NOVEMBER 16, 2007

1:00 p.m.

Place: DEQ's Offices
168 North 1950 West, Room 201
Salt Lake City, Utah 84116

Ken Bousfield's Cell Phone #: (80l) 674-2557

1. Call to Order – Chairman Erickson
2. Roll Call – Ken Bousfield
3. Introductions – Chairman Erickson
4. Approval of Minutes – October 12, 2007
5. SRF/Conservation Committee Report – Vice Chairman Myron Bateman
   1) Status Report – Ken Wilde
   2) Federal SRF Applications
      a) Erda Acres Water Company – Karin Tatum
      b) Woods Cross City – Michael Grange
6. Access to Source Protection Zones – Kate Johnson
7. Approval of the 2008 Meeting Schedules – Ken Bousfield
   a) Board Meeting Schedule for 2008
   b) SRF/Conservation Committee Meeting Schedule for 2008
8. Chairman's Report – Chairman Erickson

9. Directors Report
   a) Rural Water Association of Utah's 2008 Annual Conference
   b) Utah Water Users' 2008 Annual Conference

10. News Articles

11. Letters

12. Next Board Meeting:
   Date: *January 9, 2008*
   Tour: *Point of the Mountain Water Treatment Plant (WTP)*
   Time of Tour: *9:00 a.m.*
   Meet for the Tour and the Board meeting at:
   168 North 1950 West, Room 101
   Salt Lake City, Utah 84226
   Lunch: *1:00 p.m.*
   Lunch will be provided.
   Board Meeting Time: *1:00 p.m.*

13. Other

14. Adjourn

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Brooke Baker, Office of Human Resources at: (801) 536-4412, TDD (801) 536-4424, at least five working days prior to the scheduled meeting.

AGENDA ITEM 4

APPROVAL
OF THE

OCTOBER 12, 2007
MINUTES

State of Utah

Department of Environmental Quality

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Richard W. Sprott
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

MINUTES OF THE DRINKING WATER BOARD MEETING HELD ON OCTOBER 12, 2007 IN SALT LAKE CITY, UTAH

Board Members Present

Anne Erickson, Chair
Myron Bateman, Vice Chair
Daniel Fleming
Jay Franson, P.E.
Paul Hansen, P.E.
Petra Rust
Richard Sprott
Ron Thompson

Board Members Excused

Helen Graber, Ph.D.
David Stevens, Ph.D.
Ron Thompson

Guests

Paul Fulgham, Rural Water Association
Dale Pierson, Rural Water Association
Laura Lockhart, Attorney Generals Office
Scott Anderson, Woods Cross City
Bill Allen, Pinon Forest SSD
Kathy Allen, Pinon Forest SSD
Barbara Quintana, Pinon Forest SSD
Fred Mauerman, Pinon Forest SSD
Doug Nielsen, Sunrise Engineering
Claudia Wheeler, Metropolitan Water District of Salt Lake & Sandy

Staff

Ken Bousfield
Ken Wilde
Kate Johnson
Rich Peterson
Karin Tatum
Pete Keers
Linda Matulich

ITEM 1 – CALL TO ORDER

The Drinking Water Board convened in Salt Lake City, Utah with Chairman Erickson presiding. The meeting was called to order at 1:00 p.m.

ITEM 2 – ROLL CALL

Chairman Erickson asked Ken Bousfield to call roll of the Board members. The roll call showed there were 8 members present.

ITEM 3 – INTRODUCTIONS

Chairman Erickson welcomed everyone and asked the guests to introduce themselves.

ITEM 4 – APPROVAL OF MINUTES

Chairman Erickson stated a motion was in order to approve the minutes of the October 12, 2007 minutes.

Chairman Erickson asked to have Dianne Nielson's last name corrected in the October 12, 2007 minutes.

Petra Rust asked to have her name added to the minutes as being present at the last Board meeting.

Paul Hansen moved to approve the September 14, 2007 minutes with two minor changes: Correct the spelling of Dianne Nielson's last name, and add Petra Rust's name to the list as being present at the last Board meeting.

Jay Franson seconded.

CARRIED
(Unanimous)

ITEM 5 – SRF/CONSERVATION COMMITTEE REPORT

1) Status Report - Ken Wilde

Ken Wilde reported the Board has over $1,000,000, shown in brackets, gives a negative balance on committed funds versus what is in the State Loan Fund. There is almost $19,000 in the Hardship Grant Fund; there is $2.6 million in the Federal Loan Fund. We will be receiving a little over $300,000 a month from tax revenue. We will get the bulk of the loan payments in January.

Ken Wilde reported we have $195,000 obligated from the Federal Loan program in the first round of funds. There is a minus $500,000 in repayments from the second round of funds. We have almost $1.9 million in the Hardship Grant Funds. We have spent most of the $2.6 million from collections we received that we had made in the Hardship Fund. There is $1.9 million available in the Grant funds to use. We expect to collect another $11 million over the next 12 months.

We helped Bear River, last month, with a state loan on their project.

We have been talking with St. George on their project again. We will finalize their project request over the next 3 or 4 months.

Some of the other projects will close soon.

2) Project Priority List – Karin Tatum

Karin Tatum reported 3 projects are being added to the Project Priority List; Erda Acres Water Company, Whispering Pines and Woods Cross.

Staff plans on presenting Woods Cross and Erda Acres projects to the Board at the November Board meeting. Whispering Pines project was presented at the last Board meeting.

Petra Rust moved the Board approve the updated Project Priority List.

Ken Bassett seconded.

CARRIED
(Unanimous)

3) SRF Applications

a) Pinon Forest Special Service District – Planning – Karin Tatum

Karin Tatum reported that the Pinon Forest Special Service District (SSD) received a $14,000 grant from the CIB Board last week. Pinon Forest SSD is requesting a $15,000 planning loan from the Drinking Water Board at 0% for 5 years to complete their study.

Fred Mauerman and Kathy Allen, representing Pinon Forest Special Service District, addressed the Board.

Discussion followed.

Jay Franson moved the Board authorize a $15,000 planning loan at 0% for 5 years to Pinon Forest Special Service District.

Danny Fleming seconded.

CARRIED
(Unanimous)

4) Proposed Agreement between the Drinking Water Board and The Rural Water Association of Utah – Ken Wilde

Ken Wilde mentioned the Division and Board have been discussing eliminating systems that can't comply with our rules or have the will to comply with our rules, and eliminate the creation of such systems for a number of years now. The Rural Water Association of Utah (RWAU) made an application with the Drinking Water Board to help fund an employee to spearhead this project. Information is in the packet. There was a lengthy discussion at the Board work meeting this morning.

Ken mentioned last winter the Legislature approved planning and education for other types of projects. The other projects will be handled the same way construction projects are done. The project between the RWAU and the Board will be handled the same way. The SRF/Conservation Committee is proposing on completing a contract between the Drinking Water Board and the RWAU. The Division of Drinking Water and Drinking Water Board will provide input on the contract. Ken reviewed the process on how the agreement will work.

Dale Pierson, representing the RWAU, addressed the Board. Dale highlighted what the RWAU will be working on with the Division of Drinking Water.

Paul Fulgham addressed the Board.

Discussion followed.

Danny Fleming mentioned he is on the Rural Water Association's Board and declared a Conflict of Interest. He may abstain from voting.

Richard Sprott moved the Board approve the RWAU's proposal and direct Division staff to proceed with the preparation of a contract with RWAU. Initially, the cost of this contract will be paid from the Hardship Grant Funds. The contract will run for one year and be renewable, if mutually acceptable. Give the Executive Secretary the authority to pay for all or part of the cost of the contract with another source of funding, if the Executive Secretary is able to find another source of funding.

Paul Hansen seconded.

CARRIED

Seven voted yes. Danny Fleming abstained.

Discussion on motion.

ITEM 6 – OPERATOR CERTIFICATION COMMISSION RENEWALS

Ken Bousfield mentioned Mark Clark and Craig Fahrni's terms would expire at the end of 2007. Staff is recommending their terms to be extended for another term of 3 years.

Paul Hansen moved the Board authorize the reappointment of Mark Clark and Craig Fahrni to another term of office on the Operator Certification Commission.

Petra Rust seconded.

CARRIED
(Unanimous)

ITEM 7 – CROSS CONNECTION COMMISSION RENEWALS

Ken Bousfield mentioned Tim Collings, Jeff Tingey, Jay Franson, and Frank Mills' terms will expire at the end of 2007. Staff is recommending their terms be extended for another term of 2 years.

Petra Rust moved the Board authorize the reappointment of Tim Collings, Jeff Tingey, Jay Franson, and Frank Mills to another tem of office on the Cross Connection Control Commission.

Danny Fleming seconded.

CARRIED
(Unanimous)

The Board asked staff to talk to the members of both Commissions on recruiting new people to fill terms of the existing Commission members starting with the next renewal period.

Discussion followed.

ITEM 8 – 2008 BOARD MEETING SCHEDULE DISCUSSION

Chairman Erickson mentioned a Proposed List of the 2008 Board Meeting Schedule is in the packet for review.

Chairman Erickson asked for any comments from the Board. No comments were presented.

Chairman Erickson stated a motion would be in order to approve the Proposed 2008 Drinking Water Board Meeting Schedule.

Jay Franson moved the Board approve the 2008 Drinking Water Board Meeting Schedule.

Paul Hansen seconded.

CARRIED
(Unanimous)

Rick Sprott left the Board meeting.

ITEM 9 – DEQ FEE DOCUMENT HEARING

Ken Bousfield reported the Department of Environmental Quality submits a fee schedule every year and is approved by the Legislature. The Division of Drinking Water collects fees from the Operator Certification Program, the Cross Connection Control Program, Well Grout Witness Fees, and miscellaneous fees for: copies of files, phone calls, copies of rules, etc. The Division is not proposing any fee changes this year. The Division needs to notify the Board each year on the new Fee Schedule for the coming year.

Discussion followed.

Daniel Fleming moved the Board approve the Public Notice Fee Schedule as it has been in the past.

Petra Rust seconded.

CARRIED
(Unanimous)

ITEM 10 – OPEN AND PUBLIC MEETING ACT

Laura Lockhart reviewed the changes in the Open and Public Meetings Act with Statewide Impact for the 2007 General Session. The information is in the packet, and is informational only.

Rick Sprott rejoined the Board meeting.

Discussion followed.

ITEM 11 – FIVE YEAR RENEWAL ADOPTION FOR: RULE R305-2 – ELECTRONIC MEETING RULE AND RULE R305-3 – EMERGENCY MEETING RULE

Laura Lockhart reviewed the Electronic Meeting Rule and the Emergency Meeting Rule. The Electronic Meeting and Emergency Meeting Rules are both up for a 5-year renewal this year.

Electronic meetings are conducted by telephone. An Electronic Meetings Rule has to be in place to hold an electronic meeting.

Laura Lockhart reviewed the changes being made to the Rule. Laura Lockhart recommended the Board approve reauthorization of the Electronic Meeting Rule.

Discussion followed.

Myron Bateman moved the Board approve the 5-year renewal adoption of the R305-2 Electronic Meetings Rule.

Ken Bassett seconded.

CARRIED
(Unanimous)

Laura Lockhart reviewed the Emergency Meeting Rule. Laura Lockhart mentioned there weren't any changes in the Emergency Meeting Rule. The Emergency Meeting Rule did raise some concerns. Laura Lockhart recommended the Board let the Emergency Meeting rule sunset, which will happen on November 8, 2007.

Discussion followed.

Jay Franson moved the Board let the Rule R305-3 Emergency Meeting Rule sunset.

Petra Rust seconded.

CARRIED
(Unanimous)

ITEM 12 – CHAIRMANS REPORT

Chairman Erickson mentioned the SRF Conservation Committee has a vacancy. Petra Rust volunteered to be on the SRF/Conservation Committee. Petra will be available for the next Committee meeting.

Chairman Erickson mentioned Ken Bousfield wrote an excellent article for the OpenLine that was just published. The article outlines the Goals Ken has set for the Division for the coming year.

ITEM 13 – DIRECTORS REPORT

Ken Bousfield introduced Pete Keers. Pete is a new employee in the Division's Field Services Section.

Pete Keers gave some background on his work experience. Pete mentioned what his job duties will be for the Division of Drinking Water.

a) MOU with the Division of Public Utilities

Ken Bousfield reported that the Division of Drinking Water is working with the Division of Public Utilities on a "Memorandum of Understanding". Ken passed out a draft copy of the "Memorandum of Understanding" and reviewed it with the Board.

b) Meeting with AGIC

Ken Bousfield reported that Kate Johnson and Mark Jensen attended a meeting with the Automated Geographic Reference Center (AGRC) last week. The AGRC keeps track of the maps for State Government. The Division of Drinking Water does not have any drinking water sources as a part of this coverage, but there is an electronic copy. The delineation of the source protection zones exists electronically. The meeting was to see if the Division of Drinking Water could get a secure website for planners.

Kate Johnson updated the Board on what was discussed at the meeting with AGRC.

Discussion followed.

c) Recent Annual Meetings and Conferences

Ken Bousfield reported the Association of State Drinking Water Administrators (ASDWA) held their annual meeting last week. Ken gave an update on the meetings and discussions at the meetings.

Ken mentioned EPA is talking about redoing its definition for significant non-compliers. EPA will hold a webcast for states during November. There will be a comment period held sometime after the webcast.

Ken reviewed Utah's 25 worst drinking water systems that are on the list.

Discussion followed.

Ken mentioned that EPA is proposing revising the Total Coliform Rule. Eva Nieminski and Patti Fauver the Division and the State of Utah on the Total Coliform Rule.

Ken mentioned the Western Governors Association just sponsored a Water Policy and Planning in the West" conference. Ken updated the Board on what was discussed at the conference.

ITEM 14 – LETTERS

The letters are in the packet.

ITEM 15 – NEWS ARTICLES

The news articles are in the packet.

ITEM 16 – NEXT BOARD MEETING

The next Board meeting will be on November 16, 2007 at 168 North 1950 West, Room 201, Salt Lake City, Utah. There will be a joint work meeting in the morning and a catered lunch with the Water Quality Board in room 101. The Drinking Water Board will then convene in room 201 at 1:00 p.m. for their Board meeting.

ITEM 17 – OTHER

Chairman Erickson commended Ken for the work on the "Memorandum of Understanding".

Jay Franson thanked staff for the work they do for the Board and the state.

ITEM 18 – ADJOURN

Chairman Erickson stated a motion to adjourn the Board meeting was in order.

Paul Hansen moved to adjourn the Drinking Water Board meeting at 2:25 p.m.

Jay Franson seconded.

CARRIED
(Unanimous)

Linda Matulich
Recording Secretary

AGENDA ITEM 5

SRF/CONSERVATION COMMITTEE REPORT

5. 1) STATUS REPORT – Ken Wilde

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
CASH BALANCE AS OF SEPTEMBER 30, 2007

All interest payment and investment earning are deposited to the Hardship Grant Fund

State Loan Funds

Cash balance
less committals
(Cash balance as of 9/30/07 -
does not include projected cash
payments*)

($1,081,983)

State Hardship Grant Funds

Cash balance
less committals
(Cash balance as of 9/30/2007
-does not include projected cash
payments*)

$18,986

Total Funds Available ($1,062,997)

The sales tax maximum is $3,587,500

***Projected repayments** Oct 1, 2007 to Sep 30, 2008

1- principal payments $2,768,943 plus interest $688,502.
2- investment earings $600,000.
3- FY2008 sales tax $3,587,500.

Total Funds Available Including Projected $6,581,948

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
PROJECTS AUTHORIZED BUT NOT YET FUNDED
AS OF SEPTEMBER 30, 2007

		Cost	Date	Date	Authorized Funding		
Community	Loan #	Estimate	Authorized	Closed/Anticipated	Loan	Grant	Total
Garden City 2.31% 20 yr*	3S048	2,700,000	Sep-02	Nov-07	$1,746,000		$1,746,000
West Erda 0% 20 yr	3S074	760,000	Jun-04	?	380,000	380,000	760,000
Orderville 2.22% 30 yr	3S099	3,918,000	Nov-06	Nov-07	1,569,000	600,000	2,169,000
Escalante 2.46% 30 yr	3S104	2,160,896	Mar-07	Nov-07	1,560,000	600,896	2,160,896
Cedar Hills 2.71% 20 yr	3S108		Jul-07	Oct-07	2,090,000		2,090,000
Bear River 2.19% 20 yr	3S096		Sep-07		1,800,000	600,000	2,400,000
PLANNING LOANS/GRANTS							
Enterprise (planning loan 0% 5 yr)	3S092	7,000	May-06	Aug-07	7,000		7,000
Wellington (pl loan 2% 5 yr)	3S104	40,000	Mar-07	Sep-07	40,000		40,000
Enoch (pl loan 0% 5 yr)	3S106	36,000	May-07	Sep-07	36,000		36,000
Toquerville (pl 0% 5 yr)	3S107	16,000	Jul-07	Sep-07	16,000		16,000
Paragonah	3S110	16,250	Sep-07			16,250	16,250
							0
Total authorized but not yet funded					$9,244,000	$2,197,146	$11,441,146
FY 2008 Federal SRF 20% match					$1,645,800		$1,645,800
DDW Board Admin Fee					134,400		134,400
Grand Total					$11,024,200	$2,197,146	$13,221,346
Recently Closed:							
Circleville 2.85% 20 yr	3S105		May-07	Closed Aug 2, 2007**	222,000		222,000
Austin (planning grant)	3S102	14,000	Jan-07	Aug-07		14,000	14,000
*Garden City BAN for $254,000 was closed June 2006.							

DIVISION OF DRINKING WATER

FEDERAL SRF

AS OF September 30, 2007

1997 thru 2006 SRF Grants	
Net Federal SRF Grants:	$73,905,366
Total State Matches:	$18,358,700
Closed Loans:	-$78,598,246
Total Grant Dollars:	**$13,665,820**

Principal Repayments	
Principle (P):	$10,296,321
Interest (I):	$925,599
Total P & I:	**$11,221,920**

Earnings on Invested Cash Balance	
Total:	**$963,119**

Hardship Fund	
Total:	**$2,658,534**

SUMMARY	
Total Federal First Round Fund:	$13,665,820
Total Federal Second Round Fund:	$12,185,039
Total Federal Hardship Fund:	$2,658,534
Subtotal:	$28,509,393
Less:	
Authorized Federal 1st Round:	$13,520,000
Authorized Federal 2nd Round:	$5,061,000
Authorized Federal Hardship:	$770,800
Subtotal:	$19,351,800
Proposed Federal 1st Round Project(s):	**$0**
Proposed Federal 2nd Round Project(s):	**$7,654,500**
Proposed Federal Hardship Project(s):	**$0**
Subtotal:	**$7,654,500**
TOTAL REMAINING FIRST ROUND FUNDS:	**$145,820**
TOTAL REMAINING SECOND ROUND FUNDS:	**-$530,461**
TOTAL REMAINING HARDSHIP FUNDS:	**$1,887,734**

LESS AUTHORIZED — *(see Page 2 for details)*

PROPOSED — *(see Page 2 for details)*

AS OF: September 30, 2007

Total Balance of ALL Funds: **$1,503,093**

Projected Receipts Next Twelve Months:		
Payment:		
2008 Fed SRF Grant	$6,542,055	
State 20% Match for FY 2008	$1,645,880	
Interest on Investments	$675,000	
Principal payments	$2,845,000	
Interest	$579,762	**Receive 90% in January**
Hardship fees	$587,360	
Total:	$12,875,057	

Total Estimated Federal SRF Funds Available through 9-30-2008: $14,378,150

DIVISION OF DRINKING WATER
FEDERAL SRF
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF SEPTEMBER 30, 2007

COMMUNITY	Project			Authorized Date	Closing Date Scheduled	Authorized From Loan Funds (1st Round)			Authorized From Loan Funds (2nd Round)	Hardship Fund
	Total	Terms	Loan #			Loan	Forgiveness	Total	Loan	
Central Iron WCD Ph II	7,870,250	2.17% int 20 yrs	3F063	Nov-06	Jun-08	3,425,000		3,425,000		
Logan #3	9,545,000	0.8% int 20 yrs	3F052	May-05	Oct-07	3,000,000		3,000,000		
St George	15,000,000	1.77% int 20 yrs	3F047	Mar-05	Jan-08	1,500,000		1,500,000	4,500,000	
Twin Creeks #2	1,200,000	0% int 30 yrs	3F028	Apr-03	Dec-07	360,000	90,000	450,000		
Woodland Kolob Acres	450,000	3.63% int 15 yrs	3F048	Mar-05	Mar-08			0	450,000	
Midvale	10,000,000	2% int, 20 yrs	3F069	Jul-07	Mar-08	5,050,000		5,050,000		
Snowville	40,000	Principle Forgive	3F046	Jul-07	?		40,000	40,000		
Greenwich		0%, 20 yrs	3F070	Jul-07	?				111,000	110,300
Portage*	1,221,500	HS Grant Portion	3F054	Sep-05	Loan Closed					610,500
					TOTAL CONSTRUCTION AUTHORIZED:	**$ 13,335,000**	**$ 130,000**	**$ 13,465,000**	**$5,061,000**	**$ 720,800**
PLANNING ADVANCES AUTHORIZED:										
Beaver Dam Water	20,000	planning loan	3F062	May-06	Dec-07	20,000		20,000		
Centerfield	50,000	planning grant	3F068	Nov-06				0		50,000
Greenwich	20,000	planning loan	3F065	Sep-06	Oct-07	20,000		20,000		
Leeds Domestic WUA	15,000	planning loan	3F066	Mar-07		15,000		15,000		
					TOTAL PLANNING AUTHORIZED:	**$55,000**		**$55,000**	**$0**	**$50,000**
					TOTAL AUTHORIZED CONSTRUCTION & PLANNING:			**$13,520,000**	**$5,061,000**	**$770,800**
PROPOSED PROJECTS FOR OCTOBER/NOVEMBER 2007:										
Whispering Pines	220,000	Construction		Nov-07	Mar-08				220,000	
Erda Acres	2,420,000	Construction		Nov-07	Jul-08				2,420,000	
Pinon Forest SSD	29,000	Planning		Oct-07					14,500	
Woods Cross	5,000,000	Construction		Nov-07	Jun-08				5,000,000	
					TOTAL PROPOSED PROJECTS FOR THIS MEETING:	**$0**		**$0**	**$7,654,500**	**$0**
*Eventhough the Portage loan has closed the loan funds are being					**TOTAL PROPOSED PROJECTS:**			**$0**	**$7,654,500**	**$0**
disbursed incrementally and the hardship grant will be disbursed at the end.										

5. 2) FEDERAL SRF APPLICATIONS

a) ERDA ACRES WATER COMPANY
- Karin Tatum

Erda Acres Water Company
Presented to Drinking Water Board
November 16, 2007

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION PROJECT
AUTHORIZATION

APPLICANT'S REQUEST:

Erda Acres Water Company is requesting a Construction Loan for the amount of $1,210,000 at 2.0% interest repayable over 20 years and a grant of $1,210,000 to construct a new storage tank, upgrade the transmission line, upgrade and place new distribution lines, rehabilitation of their two wells, and chlorination facility to name a few of the major components of the project.

STAFF COMMENTS & RECOMMENDATION:

Erda Acres Water Company (Erda Acres) is doing their part in trying to regionalize small water systems in Erda. Not only have they already agreed to hook on a new development adjacent to their system they are already engaged in conversations with other planned developments. They have also attempted, however unsuccessfully, for 15 months to merge their water system with the West Erda (Golden Gardens) water system. Erda Acres can no longer wait for the Tooele County Commission and must proceed with a project on their own to avoid any more increases in their cost. The project cost has increased nearly $1,000,000 in the last 15 months. Erda Acres cannot afford to wait.

It is also the feeling of the Division that we are somewhat responsible for the increase in the overall project cost since it was the at the Division's suggestion and urging that Erda Acres would pursue a larger regional water system than they had originally planned. It is a suggestion by the Division that the SRF Committee consider additional principle forgiveness for this project not as an apology for suggesting a larger regional system, but as recognition of our role in the increased costs accrued since last summer.

A graduated repayment schedule has been proposed, which takes into account current connections and growth. A proposed impact/connection fee of $5,000 is recommended with the connection fee portion being approximately $3,000. It is also proposed that 60% of collected impact fees that exceed those estimated in the Growth Projection spreadsheet be repaid to the Board as early repayment in case growth exceeds the proposed rate (3.5%). This would be included in the terms of the bond documents.

It is recommended that the DWB authorize $2,120,000 at 0% interest repayable over 30 years with $500,000 principle forgiveness for their construction project. The project will address the storage issues on their compliance report as well as other issues with basic operation and maintenance of the water system.

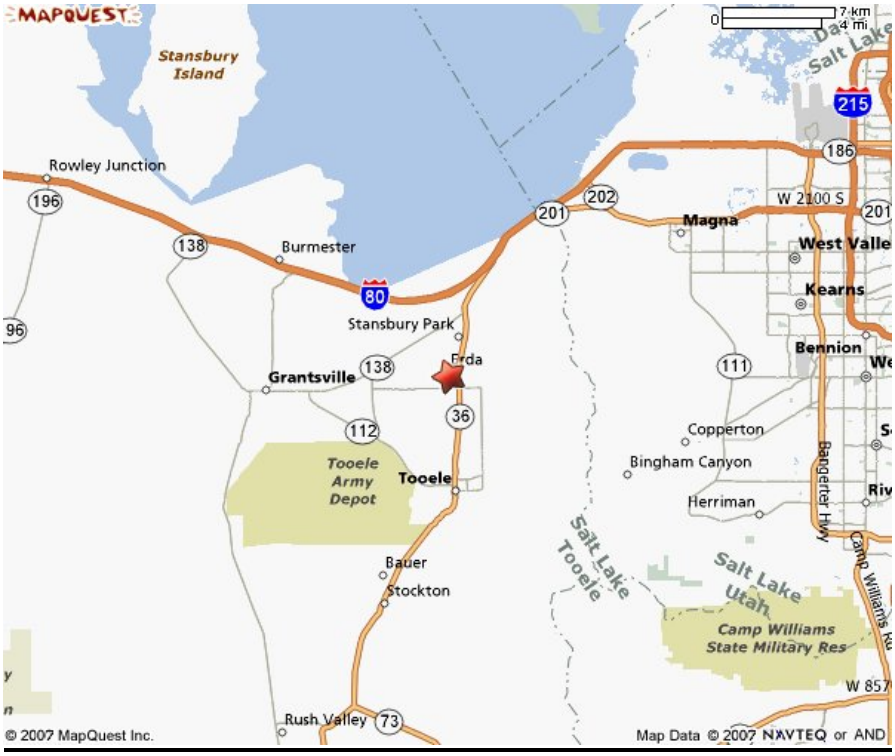
SRF COMMITTEE COMMENTS & RECOMMENDATION:

The DWB authorizes a $2,120,000 construction loan at 0% interest repayable over 30 years with $500,000 principle forgiveness to Erda Acres Water Company, with the condition that Erda Acres increase their impact fees appropriately and repay 60% of the impact fees collected that exceed the amount of the fees estimated in the Growth Projection spreadsheet and allow a modified repayment schedule as shown in the packet. Erda Acres Water Company will also adhere to the other special conditions outlined in the packet.

APPLICANT'S LOCATION:

Erda Acres Water Company (Erda Acres) is located in Tooele County.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

The project includes the following:

- Construct a new 700,000 gallon concrete storage tank
- Approximately 8,000 LF of 12" Pipe & Fittings for the Transmission Line
- Rehabilitation of the Nelson Well
- Chlorination Facility
- Water Meters
- SCADA System
- Approximately 2,000 LF of 10" and 8" Pipe & Fittings

According to *Utah Administrative Code R309-510-8*, 400gpd is recommended for indoor use, outdoor use is based on the map zone and acreage irrigated, and 1000gpm for 120 minutes is recommended for fire protection. Taking into consideration fire protection, Erda Acres Water Company (Erda Acres) is currently deficient by approximately 160,000 gallons with their current storage capacity. Using the projected growth rate as spelled out in Erda Acres Culinary Water Master Plan the system will be deficient by greater than 500,000 gallons. The new 700,000 gallon tank will allow Erda Acres to take off line their existing 100,000 gallon tank or use it for emergency purposes only and replace it with the newly proposed tank.

The 12" transmission line will be constructed along 400 West Street in Erda and will connect in with the existing water system lines.

New 8" and 10" lines will replace most of the existing Erda Acres distribution system as well as provide culinary water to the Spiral Springs subdivision.

Erda Acres connections do not have a way to measure exact water usage. New water meters will be provided for each of the connections. In addition, a water conservation plan will be established in order to promote conservation of this resource.

Utah Administrative Code, *R309-520-10*, states that "the design capacity of each chlorinator shall permit the chlorinator capacity to be such that a free chlorine residual of at least 2mg/l can be maintained in the system after 30 minutes of contact time…" In addition, there must be a detectable residual, either combined or free in the system at all times at all points in the distribution system. Currently the water company does not have an automated chlorination system. The proposed project includes chlorination equipment and a control building.

POPULATION GROWTH:

The Tooele County area is estimated to grow at an approximate rate of 3.87% projected over the next 30 years (according to the Governor's Office of Planning and Budget).

IMPLEMENTATION SCHEDULE:

Apply to DWB for Planning Funds:	September 2007
SRF Committee Conference Call:	October 2007
DWB Funding Authorization:	November 2007
Commence Design:	November 2007
Complete Design:	February 2008
Submit Plans:	February 2008
Plan Approval:	March 2008
Advertise for Bids:	April 2008
Bid Opening:	May 2008
Loan Closing:	May/June 2008
Begin Construction:	June 2008
Complete Construction:	December 2008

COST ESTIMATE:

Engineering:	$320,000
Administration:	$7,000
Legal/Bonding/Easements:	$44,000
Environmental:	$15,000
Land Acquisition:	$120,000
Construction:	$1,644,000
Contingency:	$247,000

Subtotal:	$2,397,000
Loan Origination Fee:	$23,000
Total Project Cost:	$2,420,000

COST ALLOCATION:

The cost allocation proposed for the project is shown below.

Funding Source	Cost Sharing	Percent of Project
Local Contribution	$300,000	13%
DWB Loan	$1,620,000	70%
DWB Principle Forgiveness	$500,000	17%
Total Amount:	$2,420,000	100%

ESTIMATED ANNUAL COST OF WATER SERVICE:

Operation and Maintenance: $50,000
DDW Debt Service (0%, 30 years): $21,000
DDW Debt Reserve: $5,400
Replacement Reserve: $3,550
Total Annual Cost: $79,950
Total Revenue: $15,000
Needed Income: $64,950
Annual Cost/ERC (82): $792.07
Monthly Cost/ERC (82): $66.01
Cost as % MAGI: 1.47%

SPECIAL CONDITIONS:

1. Address the appropriate issues on their Compliance Report.
2. The Parameters Resolution will need to reflect the Impact/Connection Fees totaling $5,000 per connection.
3. Erda Acres Water Company will not have enough water rights (currently) to provide water to all of the projected users over the life of this loan. It is recommended, per the Culinary Water Master Plan, that the "Water Company require new developers to furnish a minimum of 1.5ac-ft of water per connection". The Master Plan uses 400gpd for indoor water use and 1/3 acre outdoor watering. The water rights required per connection may be adjusted for smaller lots.
4. The calculations are based on a conservative growth rate of 3.5%, which is 50% of the engineer's estimate (7%). If Erda Acres Water Company sees additional growth, the annual payments will be increased. A proposed impact/connection fee of $5,000 is recommended with the connection fee portion being approximately $3,000. It is also proposed that 60% of the collected impact fees that exceed those estimated in the Growth Projection Spreadsheet be repaid to the Board as early repayment in case growth exceeds the proposed rate (3.5%). This would be included in the terms of the bond documents.

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Erda Acres FUNDING SOURCE: Federal SRF
COUNTY: Tooele
PROJECT DESCRIPTION: Construct new 700,000 gallon tank, distribution, chlorination facilities, water meters, etc

ESTIMATED POPULATION:	265	NO. OF CONNECTIONS:	82	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$60.00 *			PROJECT TOTAL:	$2,420,970
CURRENT % OF AGI:	1.34%	FINANCIAL PTS:	53	LOAN AMOUNT:	$1,620,970
ESTIMATED MEDIAN AGI:	$53,719			PRINC. FORGIVENESS:	$500,000
STATE AGI:	$34,801			TOTAL REQUEST:	$2,120,970
SYSTEM % OF STATE AGI:	154%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 4.66%			AFTER REPAYMENT PENALTY & POINTS 2.69%
ASSUMED LENGTH OF DEBT, YRS:	30	30			30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	4.66%			2.69%
REQUIRED DEBT SERVICE:	$21,000.00	$101,492.00			$79,578.00
*PARTIAL COVERAGE (15%):	$0.00	$15,223.80			$11,936.70
*ADD. COVERAGE AND RESERVE (10%):	$5,400.00	$10,133.46			$7,937.39
ANNUAL DEBT PER CONNECTION:	$321.95	$1,546.94			$1,212.83
O & M + FUNDED DEPRECIATION:	$50,000.00	$50,000.00			$50,000.00
OTHER DEBT + COVERAGE:	$0.00	$0.00			$0.00
REPLACEMENT RESERVE ACCOUNT:	$3,550.00	$0.00			$0.00
NEEDED SYSTEM INCOME:	$38,550.00	$35,000.00			$35,000.00
ANNUAL O&M PER CONNECTION:	$470.12	$426.83			$426.83
AVG MONTHLY WATER BILL:	$66.01	$164.48			$136.64
% OF ADJUSTED GROSS INCOME:	1.47%	3.67%			3.05%

ERDA ACRES PROJECT

Connection Fee = $2000

Impact Fee = $3000

DWB Loan Terms		
Local Share (total):	$	300,000
Additional PF:	$	100,000
DWB PF Amount:	$	400,000
DWB Loan Amount:	$	1,620,000
DWB Loan Term:		30
DWB Loan Interest:		**0.00%**
DWB Loan Payment:	$	54,000

Delay in Construction for 15 Months.

DW Expenses (Estimated)		
Proposed Facility Capital Cost:	$	2,420,000
Existing Facility O&M Expense:	$	40,000
Proposed Facility O&M Expense:	$	50,000
O&M Inflation Factor:		**0.0%**
Existing Debt Service:	$	-

DW Revenue Sources (Projected)		
Beginning Cash:	$	-
Existing Customers (ERU):		79
Projected Growth Rate:		**3.5%**
Treatment Impact Fee/Connection Fee:	**$**	**5,000**
ERDA ACRES & SPIRAL SPRINGS MONTHLY:	$	45.00
Erda Acres & Spiral Springs New Monthly:	**$**	**60.00**
1.7% of MAGI		**76.10**

DW Revenue Projections

			ERDA ACRES/SPIRAL		Additional Growth			**Early Repayment**														
Yr	Growth Rate (%)	Annual Growth (ERU)	Total Users (ERU)	User Charge Revenue	Impact Fee Revenue	60% of Impact Fee ($1,800)	Total Revenue	DWB Loan Repayment	DWB Loan Reserves	Remaining Principal	Principal Payment	**Potential Remaining Principal**	**Potential Total Debt Payment**	Interest Payment	Existing DW Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Debt Service Ratio
0	3.5%	3	82	44,280	15,000		59,280	-	-	1,620,000	-	1,620,000		-	-	-	-	-	59,280	59,280	-
1	3.5%	3	85	61,200	15,000	5,400	76,200	**21,000**	**5,400**	1,599,000	21,000	1,593,600	26,400	-	-	50,000	76,400	59,280	59,080	- 200	**1.25**
2	3.5%	3	88	63,360	15,000	5,400	78,360	**22,000**	**5,400**	1,577,000	22,000	1,566,200	27,400	-	-	50,000	77,400	59,080	60,040	960	1.29
3	3.5%	3	91	65,520	15,000	7,200	80,520	**24,000**	**5,400**	1,553,000	24,000	1,535,000	31,200	-	-	50,000	79,400	60,040	61,160	1,120	1.27
4	3.5%	3	94	67,680	15,000	7,200	82,680	**26,000**	**5,400**	1,527,000	26,000	1,501,800	33,200	-	-	50,000	81,400	61,160	62,440	1,280	1.26
5	3.5%	3	97	69,840	15,000	9,000	84,840	**27,000**	**5,400**	1,500,000	27,000	1,465,800	36,000	-	-	50,000	82,400	62,440	64,880	2,440	1.29
6	3.5%	3	100	72,000	15,000	9,000	87,000	**29,000**	**5,400**	1,471,000	29,000	1,427,800	38,000	-	-	50,000	84,400	64,880	67,480	2,600	1.28
7	3.5%	4	104	74,880	20,000	10,800	94,880	**36,000**	**5,400**	1,435,000	36,000	1,381,000	46,800	-	-	50,000	91,400	67,480	70,960	3,480	1.25
8	3.5%	4	108	77,760	20,000	12,600	97,760	**38,000**	**5,400**	1,397,000	38,000	1,330,400	50,600	-	-	50,000	93,400	70,960	75,320	4,360	1.26
9	3.5%	4	112	80,640	20,000	12,600	100,640	**40,000**	**5,400**	1,357,000	40,000	1,277,800	52,600	-	-	50,000	95,400	75,320	80,560	5,240	1.27
10	3.5%	4	116	83,520	20,000	14,400	103,520	**42,000**	**5,400**	1,315,000	42,000	1,221,400	56,400	-	-	50,000	97,400	80,560	86,680	6,120	1.27
11	3.5%	4	120	86,400	20,000	16,200	106,400	**42,000**		1,273,000	42,000	1,163,200	58,200	-	-	50,000	92,000	86,680	101,080	14,400	1.34
12	3.5%	4	124	89,280	20,000	18,000	109,280	**43,000**		1,230,000	43,000	1,102,200	61,000	-	-	50,000	93,000	101,080	117,360	16,280	1.38
13	3.5%	4	128	92,160	20,000	18,000	112,160	**50,000**		1,180,000	50,000	1,034,200	68,000	-	-	50,000	100,000	117,360	129,520	12,160	1.24
14	3.5%	4	132	95,040	20,000	19,800	115,040	**50,000**		1,130,000	50,000	964,400	69,800	-	-	50,000	100,000	129,520	144,560	15,040	1.30
15	3.5%	5	137	98,640	25,000	21,600	123,640	**50,000**		1,080,000	50,000	892,800	71,600	-	-	50,000	100,000	144,560	168,200	23,640	1.47
16	3.5%	5	142	102,240	25,000	23,400	127,240	**50,000**		1,030,000	50,000	819,400	73,400	-	-	50,000	100,000	168,200	195,440	27,240	1.54
17	3.5%	5	147	105,840	25,000	27,000	130,840	**60,000**		970,000	60,000	732,400	87,000	-	-	50,000	110,000	195,440	216,280	20,840	1.35
18	3.5%	5	152	109,440	25,000	28,800	134,440	**60,000**		910,000	60,000	643,600	88,800	-	-	50,000	110,000	216,280	240,720	24,440	1.41
19	3.5%	5	157	113,040	25,000	30,600	138,040	**60,000**		850,000	60,000	553,000	90,600	-	-	50,000	110,000	240,720	268,760	28,040	1.47
20	3.5%	5	162	116,640	25,000	32,400	141,640	**60,000**		790,000	60,000	460,600	92,400	-	-	50,000	110,000	268,760	300,400	31,640	1.53
21	3.5%	6	168	120,960	30,000	32,400	150,960	**60,000**		730,000	60,000	368,200	92,400	-	-	50,000	110,000	300,400	341,360	40,960	1.68
22	3.5%	6	174	125,280	30,000	32,400	155,280	**70,000**		660,000	70,000	265,800	102,400	-	-	50,000	120,000	341,360	376,640	35,280	1.50
23	3.5%	6	180	129,600	30,000	32,400	159,600	**70,000**		590,000	70,000	163,400	102,400	-	-	50,000	120,000	376,640	416,240	39,600	1.57
24	3.5%	6	186	133,920	30,000	32,400	163,920	**80,000**		510,000	80,000	51,000	112,400	-	-	50,000	130,000	416,240	450,160	33,920	1.42
25	3.5%	7	193	138,960	35,000	32,400	173,960	**80,000**		430,000	80,000	-	51,000	-	-	50,000	130,000	450,160	494,120	43,960	1.55
26	3.5%	7	200	144,000	35,000		179,000	**85,000**		345,000	85,000			-	-	50,000	135,000	494,120	538,120	44,000	1.52
27	3.5%	7	207	149,040	35,000		184,040	**85,000**		260,000	85,000			-	-	50,000	135,000	538,120	587,160	49,040	1.58
28	3.5%	7	214	154,080	35,000		189,080	**85,000**		175,000	85,000			-	-	50,000	135,000	587,160	641,240	54,080	1.64
29	3.5%	7	221	159,120	35,000		194,120	**85,000**		90,000	85,000			-	-	50,000	135,000	641,240	700,360	59,120	1.70
30	3.5%	8	229	164,880	40,000		204,880	**90,000**		-	90,000			-	-	50,000	140,000	700,360	765,240	64,880	1.72
									Total Paid in Debt Service =		1,620,000		1,620,000	-							

ERDA ACRES PROJECT

EARLY REPAYMENT CALCULATIONS (BASED ON 7% GROWTH)

DWB Loan Terms		
Local Share (total):	$ 300,000	
Additional PF:	$ 100,000	Delay in Construction for 15 Months.
DWB PF Amount:	$ 400,000	
DWB Loan Amount:	$ 1,620,000	
DWB Loan Term:	30	
DWB Loan Interest:	**0.00%**	
DWB Loan Payment:	$ 54,000	

DW Expenses (Estimated)	
Proposed Facility Capital Cost:	$ 2,420,000
Existing Facility O&M Expense:	$ 40,000
Proposed Facility O&M Expense:	$ 50,000
O&M Inflation Factor:	**0.0%**
Existing Debt Service:	$ -

DW Revenue Sources (Projected)	
Beginning Cash:	$ -
Existing Customers (ERU):	79
Projected Growth Rate:	**7.0%**
Treatment Impact Fee/Connection Fee:	**$ 5,000**
ERDA ACRES & SPIRAL SPRINGS MONTHLY:	$ 45.00
Erda Acres & Spiral Springs New Monthly:	**$ 60.00**
1.7% of MAGI	**76.10**

DW Revenue Projections

	Growth	Annual	ERDA ACRES/SPIRAL									Existing						Debt
Yr	Rate (%)	Growth (ERU)	Total Users (ERU)	User Charge Revenue	Impact Fee Revenue	Total Revenue	DWB Loan Repayment	DWB Loan Reserves	Remaining Principal	Principal Payment	Interest Payment	DW Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Service Ratio
0	7.0%	6	85	45,900	30,000	75,900	-	-	1,620,000	-	-	-	-	-	-	75,900	75,900	-
1	7.0%	6	91	65,520	30,000	95,520	**35,000**	**5,400**	1,585,000	35,000	-	-	50,000	90,400	75,900	81,020	5,120	**1.30**
2	7.0%	6	97	69,840	30,000	99,840	**40,000**	**5,400**	1,545,000	40,000	-	-	50,000	95,400	81,020	85,460	4,440	1.25
3	7.0%	7	104	74,880	35,000	109,880	**45,000**	**5,400**	1,500,000	45,000	-	-	50,000	100,400	85,460	94,940	9,480	1.33
4	7.0%	7	111	79,920	35,000	114,920	**50,000**	**5,400**	1,450,000	50,000	-	-	50,000	105,400	94,940	104,460	9,520	1.30
5	7.0%	8	119	85,680	40,000	125,680	**55,000**	**5,400**	1,395,000	55,000	-	-	50,000	110,400	104,460	119,740	15,280	1.38
6	7.0%	8	127	91,440	40,000	131,440	**60,000**	**5,400**	1,335,000	60,000	-	-	50,000	115,400	119,740	135,780	16,040	1.36
7	7.0%	9	136	97,920	45,000	142,920	**70,000**	**5,400**	1,265,000	70,000	-	-	50,000	125,400	135,780	153,300	17,520	1.33
8	7.0%	10	146	105,120	50,000	155,120	**80,000**	**5,400**	1,185,000	80,000	-	-	50,000	135,400	153,300	173,020	19,720	1.31
9	7.0%	10	156	112,320	50,000	162,320	**85,000**	**5,400**	1,100,000	85,000	-	-	50,000	140,400	173,020	194,940	21,920	1.32
10	7.0%	11	167	120,240	55,000	175,240	**90,000**	**5,400**	1,010,000	90,000	-	-	50,000	145,400	194,940	224,780	29,840	1.39
11	7.0%	12	179	128,880	60,000	188,880	**90,000**		920,000	90,000	-	-	50,000	140,000	224,780	273,660	48,880	1.54
12	7.0%	13	192	138,240	65,000	203,240	**90,000**		830,000	90,000	-	-	50,000	140,000	273,660	336,900	63,240	1.70
13	7.0%	13	205	147,600	65,000	212,600	**90,000**		740,000	90,000	-	-	50,000	140,000	336,900	409,500	72,600	1.81
14	7.0%	14	219	157,680	70,000	227,680	**90,000**		650,000	90,000	-	-	50,000	140,000	409,500	497,180	87,680	1.97
15	7.0%	15	234	168,480	75,000	243,480	**100,000**		550,000	100,000	-	-	50,000	150,000	497,180	590,660	93,480	1.93
16	7.0%	16	250	180,000	80,000	260,000	**150,000**		400,000	150,000	-	-	50,000	200,000	590,660	650,660	60,000	1.40
17	7.0%	18	268	192,960	90,000	282,960	**150,000**		250,000	150,000	-	-	50,000	200,000	650,660	733,620	82,960	1.55
18	7.0%	19	287	206,640	95,000	301,640	**150,000**		100,000	150,000	-	-	50,000	200,000	733,620	835,260	101,640	1.68
19	7.0%	20	307	221,040	100,000	321,040	**150,000**	-	50,000	150,000	-	-	50,000	200,000	835,260	956,300	121,040	1.81
20	7.0%	21	328	236,160	105,000	341,160	**157,000**	-	207,000	157,000	-	-	50,000	207,000	956,300	1,090,460	134,160	1.85
									Total Paid in Debt Service =	1,827,000	-							

ERDA ACRES WATER COMPANY

PROPOSED BOND REPAYMENT SCHEDULE

PRINCIPAL	$1,620,000.00	ANTICIPATED CLOSING DATE	01-Jun-08
INTEREST	4.66%	P&I PAYMT DUE	01-Jun-09
TERM	30	REVENUE BOND	
NOMIN. PAYMENT	$101,334.57	PRINC PREPAID:	$0.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT		PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2009	$1,620,000.00		$44,037.00	*	$0.00	$44,037.00	$1,620,000.00	0
2010	$1,620,000.00		$101,492.00		$26,000.00	$75,492.00	$1,594,000.00	1
2011	$1,594,000.00		$101,280.40		$27,000.00	$74,280.40	$1,567,000.00	2
2012	$1,567,000.00		$101,022.20		$28,000.00	$73,022.20	$1,539,000.00	3
2013	$1,539,000.00		$101,717.40		$30,000.00	$71,717.40	$1,509,000.00	4
2014	$1,509,000.00		$101,319.40		$31,000.00	$70,319.40	$1,478,000.00	5
2015	$1,478,000.00		$100,874.80		$32,000.00	$68,874.80	$1,446,000.00	6
2016	$1,446,000.00		$101,383.60		$34,000.00	$67,383.60	$1,412,000.00	7
2017	$1,412,000.00		$101,799.20		$36,000.00	$65,799.20	$1,376,000.00	8
2018	$1,376,000.00		$101,121.60		$37,000.00	$64,121.60	$1,339,000.00	9
2019	$1,339,000.00		$101,397.40		$39,000.00	$62,397.40	$1,300,000.00	10
2020	$1,300,000.00		$101,580.00		$41,000.00	$60,580.00	$1,259,000.00	11
2021	$1,259,000.00		$101,669.40		$43,000.00	$58,669.40	$1,216,000.00	12
2022	$1,216,000.00		$101,665.60		$45,000.00	$56,665.60	$1,171,000.00	13
2023	$1,171,000.00		$101,568.60		$47,000.00	$54,568.60	$1,124,000.00	14
2024	$1,124,000.00		$101,378.40		$49,000.00	$52,378.40	$1,075,000.00	15
2025	$1,075,000.00		$101,095.00		$51,000.00	$50,095.00	$1,024,000.00	16
2026	$1,024,000.00		$100,718.40		$53,000.00	$47,718.40	$971,000.00	17
2027	$971,000.00		$101,248.60		$56,000.00	$45,248.60	$915,000.00	18
2028	$915,000.00		$101,639.00		$59,000.00	$42,639.00	$856,000.00	19
2029	$856,000.00		$100,889.60		$61,000.00	$39,889.60	$795,000.00	20
2030	$795,000.00		$101,047.00		$64,000.00	$37,047.00	$731,000.00	21
2031	$731,000.00		$101,064.60		$67,000.00	$34,064.60	$664,000.00	22
2032	$664,000.00		$100,942.40		$70,000.00	$30,942.40	$594,000.00	23
2033	$594,000.00		$101,680.40		$74,000.00	$27,680.40	$520,000.00	24
2034	$520,000.00		$101,232.00		$77,000.00	$24,232.00	$443,000.00	25
2035	$443,000.00		$101,643.80		$81,000.00	$20,643.80	$362,000.00	26
2036	$362,000.00		$100,869.20		$84,000.00	$16,869.20	$278,000.00	27
2037	$278,000.00		$100,954.80		$88,000.00	$12,954.80	$190,000.00	28
2038	$190,000.00		$101,854.00		$93,000.00	$8,854.00	$97,000.00	29
2039	$97,000.00		$101,520.20		$97,000.00	$4,520.20	($0.00)	30
			$3,083,706.00		$1,620,000.00	$1,463,706.00		

*Interest Only Payment

APPLICANT:	Erda Acres Water Company P.O. Box 11 Tooele, Utah 84074-0011
PRESIDING OFFICIAL & CONTACT PERSON:	Allan Deware, President 3822 North 570 West Erda, Utah 84074 Telephone: (435) 882-0708 Email: adeware@erda.net
CONSULTING ENGINEER:	Kevin Brown, P.E. Sunrise Engineering 12227 South Business Park Drive, Ste. 220 Draper, Utah 84020 Telephone: (801) 523-0100 Fax: (801) 523-0990 Email: kbrown@sunrise-eng.com
FINANCIAL CONSULTANT:	None Appointed
ATTORNEY:	None Appointed

23053 Erda Acres Water Co.
Compliance Report
April 2, 2007

Administration:

No issues.

Operator Certification:

No issues.

Bacteriological Information:

No issues.

Chemical Monitoring:

The system needs to monitor for nitrate at their Nelson and Campbell wells in 2006.

Lead/Copper:

The system needs to sample for lead/copper at five sites in 2006.

Consumer Confidence Report

No issues.

Physical Facilities:

The system needs additional storage before they can grant additional connections.

Drinking Water Source Protection:

Updated DWSP Plans were due December 31, 2004 for WELL #2 NELSON (WS002) and #3 CAMPBELL (WS003).

Engineering Plan Review:

No issues.

5. 2) FEDERAL SRF APPLICATIONS

b) WOODS CROSS CITY
- Michael Grange

Woods Cross City
Presented to the Drinking Water Board
November 16, 2007

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN
INTRODUCTION TO SRF COMMITTEE

APPLICANT'S REQUEST

Woods Cross City is requesting $5,000,000 in financial assistance to construct a 3.17 million gallon concrete culinary water storage reservoir, drill a new well, and install approximately 5,000 feet of new distribution line. The new storage reservoir is needed to replace older tanks that are difficult to maintain and are subject to impending failure. The new well is needed to replace two wells taken out of service due to a contaminated groundwater aquifer. The new distribution line is needed to provide service to areas of the city where projected growth is expected within the next five years.

STAFF COMMENTS:

The current average water bill is $14.78 per month, based on rate and connection information supplied by Woods Cross City.

Under the proposed funding package, which consists of a $5,000,000 construction loan at 3.49% interest for 20 years, the system's monthly water bill will be $31.02.

Staff recommends authorizing a $5,000,000 construction loan at 3.49% interest for 20 years to Woods Cross City for construction of a new 3.17 million gallon concrete culinary water storage reservoir, drilling a new well, and installing approximately 5,000 feet of new distribution line.

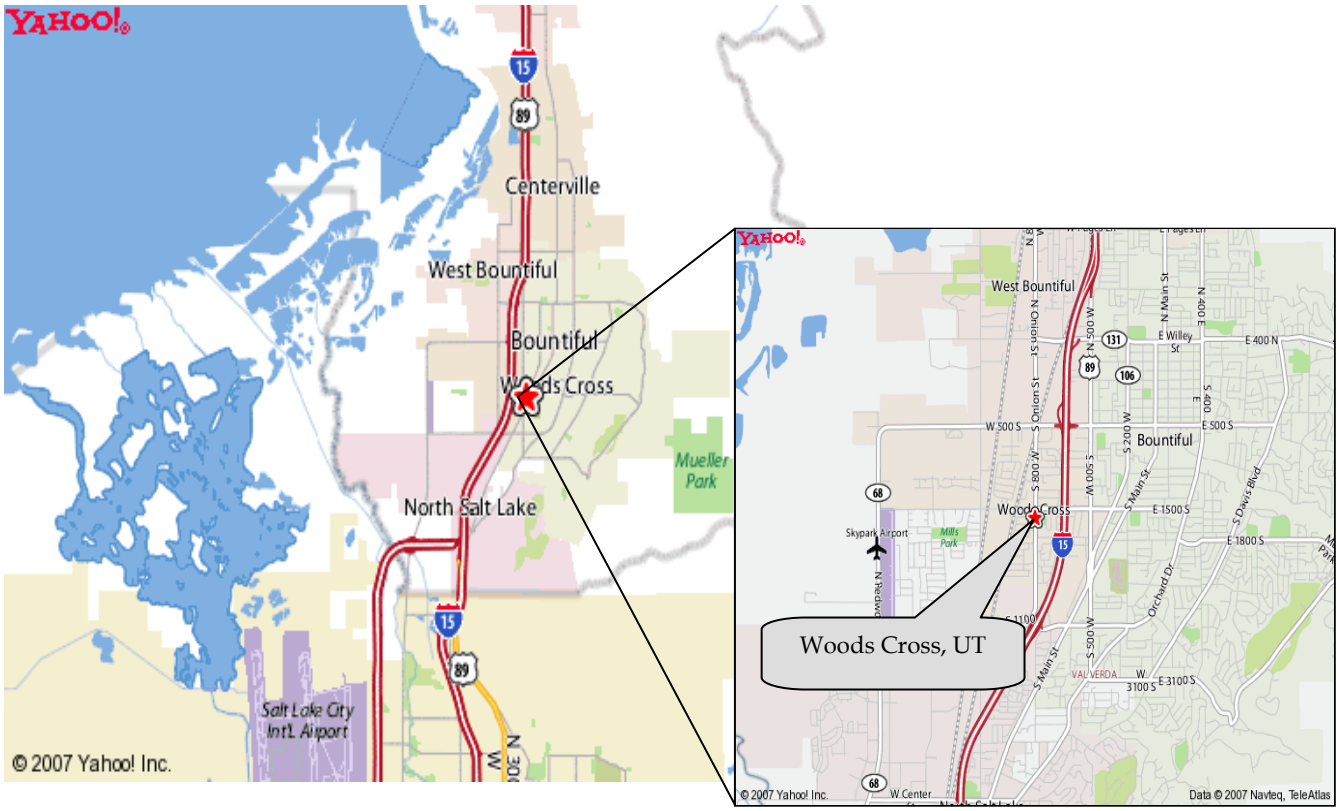
SRF / CONSERVATION COMMITTEE RECOMMENDATION:

The Drinking Water Board authorize a $5,000,000 construction loan at 3.49% interest for 20 years to Woods Cross City for construction of a new 3.17 million gallon concrete culinary water storage reservoir, drilling a new well, and installing approximately 5,000 feet of new distribution line.

APPLICANT'S LOCATION:

Woods Cross City is located in Davis County, approximately 5 miles north of Salt Lake City.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

Construct a 3.17 million gallon concrete culinary water storage reservoir, drill a new well, and install approximately 5,000 feet of new distribution line.

ALTERNATIVES CONSIDERED:

Three different reservoir locations were considered for this project. The proposed reservoir location was chosen as the best solution because Woods Cross owns the property and it is at the proper elevation to provide the required system pressure. Different well sites are still under investigation. The site that provides the best performance will be selected for the new well. Distribution line alignment along 500 South and along Redwood Road provide the best service location for the new distribution lines.

POPULATION GROWTH:

According to the Governor's Office of Planning and Budget, Woods Cross City is expected to grow at an average annual rate of change of 1.52% through 2030.

	Year	Population	ERC's
Current	2005	8,942	2,652
Projected	2030	10,282	2,900

IMPLEMENTATION SCHEDULE:

Apply to DWB for Funding:	July 2007
DWB Funding Authorization:	November 2007
Plans Submitted:	January 2008
Plan Approval:	February 2008
Advertise for Bids:	February 2008
Bid Opening:	March 2008
Loan Closing:	April 2008
Begin Construction:	April 2008
Complete Construction:	April 2009

COST ESTIMATE:

Construction:	$4,078,148
Engineering:	$297,258
Contingency:	$524,594
Legal/Bonding:	$50,000
DDW Loan Origination Fee:	$50,000
Total Capital Cost:	$5,000,000

COST ALLOCATION:

The cost allocation proposed for the project is shown below.

Funding Source	Cost Sharing	Percent of Project
DWB Loan (3.49%, 20 yrs)	$5,000,000	100.00%
Total Amount:	$5,000,000	100.00%

ESTIMATED ANNUAL COST OF WATER SERVICE:

Operation & Maintenance:	$596,823
DDW Debt Service (3.49%, 20 yrs):	$351,487
DDW 10% Coverage:	$35,149
DDW 15% Partial Coverage:	$52,723
Total Annual Cost / ERU:	$372.28
Monthly Cost / ERU:	$31.02
Cost as % of MAGI:	0.88%

SPECIAL CONDITIONS:

If necessary, resolve any issues on Compliance Report.

CONTACT INFORMATION:

APPLICANT:	Woods Cross City Corporation 1555 South 800 West Woods Cross, UT 84087 801-292-4421
PRESIDING OFFICIAL & CONTACT PERSON:	Kent Parry, Mayor 1555 South 800 West Woods Cross, UT 84087 801-292-4421
CONSULTING ENGINEER:	Lee Cammack J.U.B. Engineers. Inc. 466 North 900 West Kaysville, UT 84037 801-756-0309
CITY ATTORNEY:	Michael Mazuran Mazuran & Hayes 2118 East 3900 South, Ste B300 Salt Lake City, UT 84124 801-272-8998
BOND ATTORNEY:	Randy Larsen Ballard Spahr Andrew & Ingersoll 201 South Main, Ste 600 Salt Lake City, UT 84111 801-531-3079
FINANCIAL CONSULTANT:	Johnathan Ward Zions Bank Public Finance One South Main, 18th Floor Salt Lake City, UT 84111 801-844-7379

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Woods Cross Water System FUNDING SOURCE: Federal SRF (2nd Round)
COUNTY: Davis
PROJECT DESCRIPTION: new water storage reservoir, new distribution line, new well

100 % Loan

ESTIMATED POPULATION:	8,942	NO. OF CONNECTIONS:	2652	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$14.78 *			PROJECT TOTAL:	$5,000,000
CURRENT % OF AGI:	0.42%	FINANCIAL PTS:	32	LOAN AMOUNT:	$5,000,000
ESTIMATED MEDIAN AGI:	$42,342			PRINC. FORGIVENESS:	$0
STATE AGI:	$34,801			TOTAL REQUEST:	$5,000,000
SYSTEM % OF STATE AGI:	122%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	4.69%		3.49%
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	4.69%		3.49%
REQUIRED DEBT SERVICE:	$250,000.00	$390,734.99		$351,487.13
*PARTIAL COVERAGE (15%):	$0.00	$58,610.25		$52,723.07
*ADD. COVERAGE AND RESERVE (10%):	$25,000.00	$39,073.50		$35,148.71
ANNUAL DEBT PER CONNECTION:	$103.70	$184.17		$165.67
O & M + FUNDED DEPRECIATION:	$596,823.00	$596,823.00		$596,823.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$43,841.15	$0.00		$0.00
NEEDED SYSTEM INCOME:	$591,776.15	$547,935.00		$547,935.00
ANNUAL O&M PER CONNECTION:	$223.14	$206.61		$206.61
AVG MONTHLY WATER BILL:	$27.24	$32.57		$31.02
% OF ADJUSTED GROSS INCOME:	0.77%	0.92%		0.88%

* Current water bill is based on 2006 revenue & number of connections
**

Woods Cross Water System

DWB Loan Terms		
Local Share (total):	$	-
Other Agency Funding:	$	-
DWB Grant Amount:	$	-
DWB Loan Amount:	$	5,000,000
DWB Loan Term:		20
DWB Loan Interest:		**3.49%**
DWB Loan Payment:	$	351,487

DW Expenses (Estimated)		
Proposed Facility Capital Cost:	$	5,000,000
Existing Facility O&M Expense:	$	596,823
Proposed Facility O&M Expense:	$	596,823
O&M Inflation Factor:		**1.0%**
Existing Debt Service:	$	-

DW Revenue Sources (Projected)		
Beginning Cash:	$	-
Existing Customers (ERC):		2,652
Projected Growth Rate:		**0.8%**
Impact Fee/Connection Fee:	$	2,328
Current Monthly User Charge:	$	14.78
Needed Average Monthly User Charge:	$	31.02

DW Revenue Projections

Yr	Growth Rate (%)	Annual Growth (ERC)	Total Users (ERC)	User Charge Revenue	Impact Fee Revenue	Total Revenue	DWB Loan Repayment	DWB Loan Reserves	Remaining Principal	Principal Payment	Interest Payment	Existing DW Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Debt Service Ratio
0	0.8%	21	2,652	470,371	48,888	519,259	-	-	5,000,000	-	-	-	596,823	596,823	-	- 77,564	- 77,564	-
1	0.8%	21	2,673	995,112	48,888	1,044,000	**242,500**	**35,149**	4,932,000	68,000	174,500	115,373	596,823	989,845	- 77,564	- 23,409	54,155	1.25
2	0.8%	22	2,695	1,003,302	51,216	1,054,518	**245,127**	**35,149**	4,859,000	73,000	172,127	115,373	602,791	998,440	- 23,409	32,669	56,078	1.25
3	0.8%	21	2,716	1,011,120	48,888	1,060,008	**357,579**	**35,149**	4,671,000	188,000	169,579	-	608,819	1,001,547	32,669	91,131	58,461	1.26
4	0.8%	22	2,738	1,019,310	51,216	1,070,526	**361,018**	**35,149**	4,473,000	198,000	163,018	-	614,907	1,011,074	91,131	150,583	59,452	1.26
5	0.8%	22	2,760	1,027,500	51,216	1,078,716	**366,108**	**35,149**	4,263,000	210,000	156,108	-	621,056	1,022,313	150,583	206,986	56,404	1.25
6	0.8%	22	2,782	1,035,691	51,216	1,086,907	**363,779**	**35,149**	4,048,000	215,000	148,779	-	627,267	1,026,194	206,986	267,699	60,712	1.26
7	0.8%	22	2,804	1,043,881	51,216	1,095,097	**370,275**	**35,149**	3,819,000	229,000	141,275	-	633,540	1,038,964	267,699	323,832	56,133	1.25
8	0.8%	23	2,827	1,052,443	53,544	1,105,987	**370,283**	**35,149**	3,582,000	237,000	133,283	-	639,875	1,045,307	323,832	384,513	60,681	1.26
9	0.8%	22	2,849	1,060,634	51,216	1,111,850	**370,012**	**35,149**	3,337,000	245,000	125,012	-	646,274	1,051,434	384,513	444,928	60,415	1.26
10	0.8%	23	2,872	1,069,196	53,544	1,122,740	**370,461**	**35,149**	3,083,000	254,000	116,461	-	652,737	1,058,347	444,928	509,322	64,394	1.27
11	0.8%	23	2,895	1,077,759	53,544	1,131,303	**370,597**		2,820,000	263,000	107,597	-	659,264	1,029,861	509,322	610,764	101,442	1.27
12	0.8%	23	2,918	1,086,321	53,544	1,139,865	**370,418**		2,548,000	272,000	98,418	-	665,857	1,036,275	610,764	714,354	103,591	1.28
13	0.8%	23	2,941	1,094,884	53,544	1,148,428	**370,925**		2,266,000	282,000	88,925	-	672,515	1,043,440	714,354	819,342	104,987	1.28
14	0.8%	24	2,965	1,103,818	55,872	1,159,690	**370,083**		1,975,000	291,000	79,083	-	679,240	1,049,324	819,342	929,708	110,367	1.30
15	0.8%	24	2,989	1,112,753	55,872	1,168,625	**370,928**		1,673,000	302,000	68,928	-	686,033	1,056,960	929,708	1,041,373	111,665	1.30
16	0.8%	24	3,013	1,121,688	55,872	1,177,560	**370,388**		1,361,000	312,000	58,388	-	692,893	1,063,281	1,041,373	1,155,653	114,279	1.31
17	0.8%	24	3,037	1,130,623	55,872	1,186,495	**370,499**		1,038,000	323,000	47,499	-	699,822	1,070,321	1,155,653	1,271,827	116,174	1.31
18	0.8%	24	3,061	1,139,558	55,872	1,195,430	**370,226**		704,000	334,000	36,226	-	706,820	1,077,046	1,271,827	1,390,210	118,383	1.32
19	0.8%	24	3,085	1,148,492	55,872	1,204,364	**370,570**		358,000	346,000	24,570	-	713,888	1,084,458	1,390,210	1,510,116	119,906	1.32
20	0.8%	25	3,110	1,157,799	58,200	1,215,999	**370,494**		-	358,000	12,494	-	721,027	1,091,521	1,510,116	1,634,594	124,478	1.34
								Total Paid in Debt Service =		5,000,000	2,122,269						

Woods Cross Water System

PROPOSED BOND REPAYMENT SCHEDULE

100 % Loan

PRINCIPAL	$5,000,000.00	ANTICIPATED CLOSING DATE	01-Apr-08
INTEREST	3.49%	P&I PAYMT DUE	01-Sep-09
TERM	20	REVENUE BOND	
NOMIN. PAYMENT	$351,487.13	PRINC PREPAID:	$0.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT	=	PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2008	$5,000,000.00		$74,162.50	*	$0.00	$74,162.50	$5,000,000.00	0
2009	$5,000,000.00		$242,500.00		$68,000.00	$174,500.00	$4,932,000.00	1
2010	$4,932,000.00		$245,126.80		$73,000.00	$172,126.80	$4,859,000.00	2
2011	$4,859,000.00		$357,579.10		$188,000.00	$169,579.10	$4,671,000.00	3
2012	$4,671,000.00		$361,017.90		$198,000.00	$163,017.90	$4,473,000.00	4
2013	$4,473,000.00		$366,107.70		$210,000.00	$156,107.70	$4,263,000.00	5
2014	$4,263,000.00		$363,778.70		$215,000.00	$148,778.70	$4,048,000.00	6
2015	$4,048,000.00		$370,275.20		$229,000.00	$141,275.20	$3,819,000.00	7
2016	$3,819,000.00		$370,283.10		$237,000.00	$133,283.10	$3,582,000.00	8
2017	$3,582,000.00		$370,011.80		$245,000.00	$125,011.80	$3,337,000.00	9
2018	$3,337,000.00		$370,461.30		$254,000.00	$116,461.30	$3,083,000.00	10
2019	$3,083,000.00		$370,596.70		$263,000.00	$107,596.70	$2,820,000.00	11
2020	$2,820,000.00		$370,418.00		$272,000.00	$98,418.00	$2,548,000.00	12
2021	$2,548,000.00		$370,925.20		$282,000.00	$88,925.20	$2,266,000.00	13
2022	$2,266,000.00		$370,083.40		$291,000.00	$79,083.40	$1,975,000.00	14
2023	$1,975,000.00		$370,927.50		$302,000.00	$68,927.50	$1,673,000.00	15
2024	$1,673,000.00		$370,387.70		$312,000.00	$58,387.70	$1,361,000.00	16
2025	$1,361,000.00		$370,498.90		$323,000.00	$47,498.90	$1,038,000.00	17
2026	$1,038,000.00		$370,226.20		$334,000.00	$36,226.20	$704,000.00	18
2027	$704,000.00		$370,569.60		$346,000.00	$24,569.60	$358,000.00	19
2028	$358,000.00		$370,494.20		$358,000.00	$12,494.20	$0.00	20
			$7,196,431.50		$5,000,000.00	$2,196,431.50		

*Interest Only Payment

06021 Woods Cross
Compliance Report
October 10, 2007

Administration:

No Issues

Operator Certification:

No Issues

Bacteriological Information:

Total Coliform Public Notice violation for August 2005.

Chemical Monitoring:

No Issues

Lead/Copper:

No Issues

Consumer Confidence Report:

No Issues

Physical Facilities:

No Issues

Drinking Water Source Protection:

Woods Cross is in compliance with all source protection requirements as of this date.

AGENDA ITEM 7

APPROVAL OF THE 2008 MEETING SCHEDULES
- Ken Bousfield

a) BOARD MEETING SCHEDULE FOR 2008

APPROVED AT THE OCTOBER 12, 2007
BOARD MEETING

AND ALSO A
HANDOUT

DRINKING WATER BOARD
2008 MEETING
SCHEDULE

DATE	PLACE	TOUR/WORK MEETING	NOTES
January 11, 2008	Salt Lake City	Tour & Board meeting	Tour Metropolitan Water District of Salt Lake and Sandy's Point of the Mountain WTP
February 29, 2008	St. George	Rural Water Conference & Board meeting	
May 9, 2008	To be determined	Tour and Board meeting	To be determined
July 11, 2008	To be determined	Tour and Board meeting	To be determined
September 12, 2008	Price	Utilities meeting & tour Board meeting	Meet with Price River Water Improvement District & Helper
November 14, 2008	Salt Lake City	Combined with the Water Quality Board	

The 2008 SRF/Conservation Committee's 2008 Schedule is in the packet to be approved at the Board meeting today.

The 2008 Board meeting schedule was approved at the October 12, 2007 Board meeting. Here is another copy of the 2008 Board meeting schedule you can use today to review with the SRF/Conservation Committee's 2008 schedule that is in the packet.

Any questions, please let Ken Wilde know.

Thank you!!

AGENDA ITEM 7

APPROVAL OF THE 2008 MEETING SCHEDULES
- Ken Bousfield

b) SRF/CONSERVATION COMMITTEE MEETING SCHEDULE FOR 2008

DRINKING WATER BOARD
FINANCIAL ASSISTANCE SUBMITTAL SCHEDULE

2008

APPLICATION CUT-OFF DATE		SRF PACKET MAILING DATE		SRF CONF CALL DATE		DWB PACKET DEADLINE DATE		**DWB MEETING DATE**
November 5, 2007		December 3, 2007		December 12, 2007 Wed. 9:00 AM		December 27, 2007 Thursday BY NOON		**January 11, 2008**
December 31, 2007	4 weeks (approximately)	January 28, 2008	1 week (approximately)	February 6, 2008 Wed. 9:00 AM	1 week (approximately)	February 14, 2008 Thursday BY NOON	2 weeks (approximately)	**February 29, 2008**
March 10, 2008		April 7, 2008		April 16, 2008 Wed. 9:00 AM		April 24, 2008 Thursday BY NOON		**May 9, 2008**
May 12, 2008		June 9, 2008		June 18, 2008 Wed. 9:00 AM		June 26, 2008 Thursday BY NOON		**July 11, 2008**
July 14, 2008		August 11, 2008		August 20, 2008 Wed. 9:00 AM		August 28, 2008 Thursday BY NOON		**September 12, 2008**
September 15, 2008		October 13, 2008		October 22, 2008 Wed. 9:00 AM		October 30, 2008 Thursday BY NOON		**November 14, 2008**
November 3, 2008		December 1, 2008		December 10, 2008 Wed. 9:00 AM		December 18, 2008 Thursday BY NOON		**January 9, 2009**

AGENDA ITEM 9

DIRECTORS REPORT

a) RURAL WATER ASSOCIATION OF UTAH'S
2008 ANNUAL CONFERENCE
INFORMATION

RURAL WATER ASSOCIATION OF UTAH's
2008 ANNUAL CONFERENCE

The Rural Water Association of Utah's 2008 Annual Conference will be from February 25, 2008 to February 29, 2008 at the Dixie Center in St. George, Utah. The Board meeting will be on February 29, 2008.

Linda will send you the conference information as soon as she receives it from the Rural Water Association of Utah.

Linda has reserved a block of rooms at the Fairfield Inn by the Dixie Center. Linda will be working with the Fairfield Inn in December/January with names and reservations numbers for each room. Linda will also be working with Shannon, at the Rural Water Association of Utah, to register you for the conference.

When Linda gets the reservations for the hotel and the registration for the Conference completed, she will send you the information. The rooms at the Fairfield Inn are reserved from February 25, to March 1, 2008.

Hopefully, Linda will get the information the end of December and/or in January on the conference and the hotel. Linda will send you the information when she gets it. After you have received the information and have been able to review it, please let Linda know if you need her to change anything on the conference registration and/or reservations for the Fairfield Inn.

Linda has a list of your credit cards to use for reserving hotel/motel rooms:

Anne, Myron, Paul, & Ron: American Express	David: I need to get a card number & expiration date
Danny, Petra & Ken: VISA	Ken: Discover Card
Helen & Rick: MasterCard	

Please call Linda and double check with her on your credit card number and expiration date, to make sure she has the correct information.

Dr. Stevens, please call Linda and give her a credit card name, number and expiration date that you want her to use reserving motel rooms.

These cards are password protected and are only used for reserving motel rooms and receiving confirmation numbers. Linda will call you back with the information on the hotel when she gets it completed.

If you have any questions, please call Linda.

Thanks.

AGENDA ITEM 9

DIRECTORS REPORT

b) UTAH WATER USERS' 2008 ANNUAL CONFERENCE

INFORMATION ON CONFERENCE HANDOUT

The 2008 Utah Water Users' Workshop
March 10-12, 2008
The Dixie Center – St. George, Utah

GENERAL SESSIONS:

Utah Water Issues – Governor's Office
National Water Issues

WORKSHOPS:

State Engineer – Current Utah Water Rights Issues
Legal Aspects of Utah Water
Legislative Update
Irrigation Company Liability Issues
Partial Right Owner Approval for Change Application Filing
Valuing Water Based on Depletion
Adjudication – Solving Water Management Problems
GIS-Based Water Resource Management Tools
NRCS Conservation Innovation Grant Program
Profitability and Efficiency through Irrigation Water Management
Huntington Cleveland Salinity Control Project Update
Great Salt Lake Elevations – Past, Present, and Future
Lake Powell Pipeline Progress Report
Colorado River Issues
Drought in Utah: Learning from the Past – Preparing for the Future
Snake Valley Issues
Utah Lake Commission
Upper Enterprise Reservoir
Jordanelle Hydroelectric Power Project
Water 2025 Project Status
A.V. Watkins Dam (Willard Bay), Scofield, and Deer Creek Dam Modifications
Climate Change and Implications for Western States Water
Water Supply Outlook
New Developments, New Sources, and Associate Water Systems: What You Should Know
The Snake Valley Hydrologic Basin – Recent Scientific Assessments
Quagga Mussel Threat to Utah
Provo River Stream Restoration
Nonpoint Source Funding Program Priorities – New grants
New Water Reuse Rulemaking
"Advice You Can Drink"
What's New in Water Quality
Cutler Reservoir & Bear River TMDL/Pollution Reduction Plan
Upper Sevier River Watershed Restoration
Small Reservoir Flushing Management Practices
"Creating a Vision for Your Life"

Workshop Registration

Through Wednesday, February 13, 2008, registration will be $75 including one banquet ticket ($60 without a banquet ticket): thereafter, registration will be $80 without a banquet ticket and can be purchased at the Workshop. You can purchase extra banquet tickets at a discounted price of $20. **Note: extra banquet tickets will be available ONLY with pre-registration.** There will be a surcharge on all refunds prior to Wednesday, February 13, 2008, after which no refunds will be made. No Credit Cards or Purchase Orders accepted. **Pre-registration fees will not be accepted after February 13, 2008.** Questions - call Bob Hill at 435-797-2791 or fax 453-797-1248.

MAKE CHECKS PAYABLE TO and return form by **February 13, 2008** to:

Utah Water Users Workshop
c/o R.W. Hill
Utah State University
4105 Old Main Hill
Logan, UT 84322-4105

Name:_____ Phone:_____
Organization:_____ E-mail:_____
Address: _____
City:_____ State:_____ Zip:_____

PRE-REGISTRATION– INCLUDES ONE banquet ticket.	☐	$75
EXTRA BANQUET TICKET(S) – before February 13, 2008.	☐	$20
PRE-REGISTRATION FEE – DOES NOT include a banquet ticket.	☐	$60
Guest Program. (may also register at the workshop) – February 13, 2008, or later	☐	$10

Guest Name:_____

Total Amount Enclosed $_____

Workshop Sponsors

- Utah Water Users' Association and Utah State University Extension in cooperation with:
- Utah Farm Bureau Federation
- State of Utah: Department of Environmental Quality; Department of Natural Resources (Water Rights and Water Resources Division), and the Utah Department of Agriculture and Food
- U.S. Government: Bureau of Reclamation, Natural Resources Conservation Service, Geological Survey

---

Golf Tournament Form

March 10, 2008, 8:30 a.m., Coral Canyon Golf Course, Scramble Format
Shotgun start, $90 includes course fee, cart rental, lunch and prizes.

Name:_____ Phone:_____
Handicap:_____ 18 Hole Score:_____
E-mail: _____

Please send a **SEPARATE check or money order payable to Kent Jones** for the amount of $90 (includes course fee, cart rental, lunch and prizes) plus 18 hole score or handicap for each participant by February 22, 2008 to:

Kent Jones
Utah Division of Water Rights
P.O. Box 146300
Salt Lake City, UT 84114-6300
Phone: (801)538-7405

Golf Tournament Sponsors

Bowen, Collins & Associates, Inc; CH2M Hill; MWH Engineering

Robert W. Hill, Irrigation Specialist

AGENDA ITEM 10

NEWS ARTICLES

The Salt Lake Tribune

http://www.sltrib.com

Kane County OKs leasing of its water

By Mark Havnes
The Salt Lake Tribune
Salt Lake Tribune
Article Last Updated:11/09/2007 01:16:18 AM MST

KANAB - Use it or lose it.

That is the reason the Kane County Water Conservancy District decided to lease almost 30,000 acre feet of water a year to a company that has plans for Utah's first nuclear power generating project.

About 25 people showed up at the district's monthly meeting in Kanab on Thursday night to hear what went into the decision to lease the water to Transition Power Development, LLC, which wants to help build at least two 1,500 megawatt nuclear power plants, probably in eastern Utah's Emery County.

The district received the water from the defunct Andalex coal project, which had been planned for the county but died with the creation of the Grand Staircase-Escalante National Monument in 1996.

After a $10,000 payment, the district is scheduled to receive $100,000 a year until the plant is built, at which time the annual payment for the water, which will be drawn from the Green River, will jump to $1 million a year.

District executive director and legislator, Mike Noel, told the group that if the district did not come up with a legitimate use for the water - which could service close to 30,000 households a year - it would lose the rights to the valuable commodity.

When a member of the public asked why the water could not be drawn for use by county residents, Noel explained that the district can't justify how it would use such a huge quantity of water.

Instead, revenue from the nuclear deal will be a source of Kane County's funding for the proposed Lake Powell pipeline project that allocates a more manageable 10,000 acre feet of water a year to the county, with larger amounts going to Washington and Iron counties.

District board member Tony Chelewski explained the issue faced by the district in rancher terms.

"If I drop 1,000 bales of hay in your yard and you don't have any [livestock], I'm going to come get," said Chelewski. "It's the same with water rights. Use it or lose it."

Several people at the meeting were upset with the county getting involved in promoting nuclear power.

Joseph Woods, who called water the "most valuable commodity on Earth," was upset the water would facilitate the creation of nuclear waste in the state that fought the Goshute Tribe over a proposal to store the same type of waste on its reservation in western Utah.

"We stopped that and now we want to do this for our grandchildren to live with?' Woods asked.

Noel said while he is against storing nuclear waste in Utah from other states he thought it would be disingenuous to say Utah could not store waste produced by the state in the state.

"We'll take care of it," he said.

Noel said that the water district would not be responsible for costs associated with delivering the water to the plant sites or with environmental studies.

When asked to whom Transition planned to sell the permits for construction and operations of the nuclear plants if granted, Noel said there are no clients on the horizon.

mhavnes@sltrib.com

DESERET
Morning News

Bush loses water fight in 1st veto override

By David M. Herszenhorn
New York Times News Service

Published: November 9, 2007

WASHINGTON — The Senate on Thursday dealt President Bush the first veto override of his presidency, with a resounding bipartisan vote to adopt a $23.2 billion water resources bill that authorizes popular projects across the country.

The 79-14 vote sent a clear signal that the Democrats in control of Congress planned to test the power of the White House on other fronts, and it gave Republicans a chance to show distance from an unpopular president heading into a tough election year.

Utah's two Republican senators, Orrin Hatch and Bob Bennett, voted for the override.

"We have said today, as a Congress to this president, you can't just keep rolling over us like this," said Sen. Barbara Boxer, D-Calif., who led the charge on the water bill as chairwoman of the Environment and Public Works Committee.

"You can't make everything a fight because we'll see it through," Boxer added. "And that's a big deal. It isn't easy for members of the other side to stand up to a president in their own party. I know. I know what that's like. It's hard."

If the Democrats have their way, Republicans will likely find themselves in that difficult position repeatedly in the next few weeks as Congress looks to go toe to toe with the administration on a series of budget bills, most of which Bush has threatened to veto.

The water bill adopted by the Senate authorizes popular projects in states across the country, including hurricane recovery efforts in Louisiana, environmental restoration in the Florida Everglades and flood control in California. But the bill does not actually appropriate money for the projects, which must be done in spending bills.

Standard-Examiner

Story View (Business)

GSL's new plans topic of meetings

Wednesday, November 7, 2007

By Jordan Muhlestein
Standard-Examiner staff

Minerals operation to be expanded

OGDEN -- The US Army Corps of Engineers plans today to hold the first of three meetings to allow the public to learn about a proposed expansion of the Great Salt Lake Minerals operation in western Weber County.

The expansion would add about 33,000 acres to the facility, allowing for three new solar evaporative ponds used in the production of sulfate of potash, a potassium fertilizer used on crops such as fruit, vegetables and tree nuts.

The corps is sponsoring the meetings as part of the preparation of a draft environmental impact statement on the expansion, according to the corps' notice of intent for the statement.

The first meeting is scheduled for 5-9 p.m. today at South Davis Jr. High School, 298 W. 2600 South, Bountiful. The second meeting is set for 5-9 p.m. Thursday at the Ogden Nature Center, 966 W. 12th Street, Ogden. A third meeting will be Nov. 14 in Salt Lake City.

Each meeting will allow people to learn about and make comments on the proposed expansion.

The environmental impact statement will address impacts to wildlife, water quality, water levels, transportation and cultural resources in the area of the proposed expansion, says the notice of intent.

The draft environmental impact statement is scheduled for release in October 2008.

Peggy Landon, director of corporate communications for Great Salt Lake Minerals, said the company has applied to the state for a lease on the land, but would be unable to do any developing until the impact study is finished.

The proposed evaporation ponds include an 8,000-acre pond in the Bear River Bay on the eastern side of the lake, an 18,000-acre pond south of Dolphin Island on the west side, and a 7,000-acre pond around Clyman Bay on the western shore.

Landon said the expansion would add another 100,000 tons annually to the company's current production of 450,000 tons of sulfate of potash.

She said the company is committed to expanding responsibly and to continuing to operate in an environmentally responsible manner.

"We really share the common goal that everyone has of keeping the Great Salt Lake clean," Landon said.

Some environmental groups, including the Friends of the Great Salt Lake and the Western Hemisphere Shorebird Reserve Network, have protested the expansion proposal.

In a letter to Utah Department of Natural Resources Executive Director Mike Styler, Marshall P. Jones, chair of the Western Hemisphere Shorebird Reserve Network Hemispheric Council, said the GSL expansion would adversely affect biodiversity in the area, particularly with several species of birds, including Snow Plover, two species of phalaropes and american avocets.

Landon said the environmental impact study will evaluate any impacts that the proposed project would have, and the company is dedicated to working with all concerned parties about the impacts.

Great Salt Lake Minerals is a subsidiary of Kansas-based Compass Minerals International Inc.

Anyone with questions about the expansion and the draft environmental impact statement can call the Corps project manager, Jason Gipson, 295-8380 ext. 14, or e-mail jason.a.gipson@usace.army.mil. Please mention the project identification number 200100121 in the e-mail.

The Salt Lake Tribune

http://www.sltrib.com

American Fork

Horse club may lose facilities to irrigation pond

By Steve Gehrke
The Salt Lake Tribune
Salt Lake Tribune
Article Last Updated:11/07/2007 02:13:35 AM MST

American Fork might have to sacrifice some of its rural flare to make way for an irrigation pond and, possibly, homes.

Mayor Heber Thompson recently sent a letter to members of the American Fork Riding Club, giving them until Jan. 1 to clear their livestock and personal property off the city's Tri-City Recreation land that abuts the Fox Hollow Golf Course.

The city wants to replace the stables and exercise equipment with a new pond - a crucial element in the Utah County community's coming pressurized irrigation system.

But club members want American Fork to find a spot that won't leave them high and dry. They don't mind if the city uses part of the land, but the riding club's secretary-treasurer Chris Mitchell is concerned the city will also use part of that property to build golf-course-adjacent homes.

Meanwhile, Thompson says there's no place better for the pond.

The elevation on that city-owned land provides for easy, cost-effective engineering, he said, adding that rumors of home-building are based on off-the-cuff remarks. The city, he said, has no plans to develop the area.

"We're trying to help the club, but we really can't compromise where this reservoir is going to be," Thompson said. "And I've gotten a sense from the [City] Council that they don't think a recreation facility is very good use on land that's so valuable for other purposes."

The riding group says it has kept up its $1 per year lease - except when its payment was refused in 2003 - so the city shouldn't be taking its land. Thompson says the lease expired several years ago, and the group has been operating under a "gentleman's agreement."

Amy Carter and her three kids regularly practice barrel racing and riding, and her husband, Jeron, is the president of the riding club.

Her family lives in neighboring Lehi, and she says several owners of the 40-plus horses boarded at the stables will have nowhere to turn if they're forced out.

"The riding club built everything there. We put all our own money and time into that place," she says. "All we've known growing up is having horses, and that's all my kids have ever known. We can't afford property anywhere else . . . because prices are so outrageous."

Thompson says the city is in talks with Utah County to supply 12 stables at what he calls a nicer, more modern indoor-outdoor facility near the American Fork-Lehi boundary. Not such a sweet deal, the club says, considering they have 40 stalls at the current location.

"I guess he wants us all to draw straws for those 12," says Mitchell.

Steve Berry, a riding-club member and horse owner, says the issue is simply a case of a money-hungry city trying to claim more cash any way it can. He fears American Fork's rural nature is being overtaken by growth.

"There's more to life than just seeing how much money you can put in the city's pockets. The residents need places like this to have fun and recreate," Berry said.

"All over, the city builds parks for people, but to those people with horses, they're saying, 'You're not welcome anymore.' "

sgehrke@sltrib.com

What's next

American Fork City will hold a groundbreaking at about 3:30 p.m. Friday for its pressurized irrigation system near 1500 North and 200 East. The city will hold a public open house Nov. 16, from 5 to 7 p.m. at the American Fork Library, 64 S. 100 East.

The Salt Lake Tribune

http://www.sltrib.com

The perfect drought: Water shortages demand efficiency, new thinking
Tribune Editorial
Salt Lake Tribune
Article Last Updated:11/05/2007 07:35:42 PM MST

Water. Without it, there is no life.

That's not news in the arid West. What is news is that the dual pressures of global warming and population growth are placing severe stress on fresh water supplies across the United States. Both the Southwest *and* the Southeast are enduring droughts.

If Americans do not get much smarter about how we use fresh water - and fast - the nation could face perpetual thirst that, in turn, could cause economic and population dislocation.

Don't buy that? Check out the Oct. 21 issue of *The New York Times Magazine*. The cover story, titled "The Perfect Drought," by Jon Gertner, is an excellent primer on the West's water dilemma.

Utahns will be familiar with the information there about our dependence on the declining Rocky Mountain snowpack, the effect of drier winters on the stream flows in the Colorado River, the bathtub rings in Lake Powell and Lake Mead, the battle over water in Snake Valley as Las Vegas plans to tap groundwater in east central Nevada and pipe it south.

What they may not know, however, is that in addition to conserving fresh water by tearing out lawns and replacing them with drought-resistant plants and installing low-flow toilets, we also need to rethink how we use potable water. It doesn't make much sense to pour it on our yards and flush it down our toilets. We could use recycled water for that.

We also must rethink allocating huge quantities of water to farming when land-use patterns in the urban West have changed so drastically.

If you're thinking that we can outflank climate change by building more dams on places like the Bear River, you might want to think again. Storing water in surface reservoirs may not be as efficient as storing it underground, where evaporation can't steal it.

In any case, it's going to require a host of different strategies for Utah to feed and water its growing population, and we're going to have to think outside the Bureau of Reclamation's 20th-century toolbox to get the job done.

To this end, Congressman Jim Matheson has introduced a bill instructing the Environmental Protection Agency to work with nongovernmental agencies on research to increase water use efficiency and conservation.

That's only a drop in the bucket, but it's a start.

The Salt Lake Tribune

http://www.sltrib.com

Kansas mineral company

Greens: Plan bad for Great Salt Lake birds

Fourteen groups protest plant-expansion idea; an environmental study is in the works

By Patty Henetz
The Salt Lake Tribune
Salt Lake Tribune

Article Last Updated:11/06/2007 01:01:05 AM MST

Environmental organizations are protesting a proposal to open thousands of acres of Great Salt Lake shoreline to a Kansas minerals company that will undergo an environmental study by the U.S. Army Corps of Engineers.

The plan would allow Great Salt Lake Minerals Corp. to expand its business on 33,000 acres adjacent to its current site. The Utah Division of Forestry, Fire and State Lands already has approved a 10-year lease on the property despite concerns for the lake, one of the globe's most important stops for migratory shorebirds.

The July lease immediately ran into opposition from 14 conservation groups, whose members say the plan would imperil 5 million birds and 250 species that live in or around the lake, including pelicans, gulls, peregrine falcons, Wilson's phalaropes and snowy plovers.

Great Salt Lake Minerals of Overland, Kan., wants to build three solar evaporation ponds on 33,000 acres. The project would include an 8,000-acre pond on the east side of the Great Salt Lake in the Bear River Bay.

The company also would build two new solar ponds on the west side of the lake: an 18,000-acre Dolphin Island expansion pond and a 7,000-acre pond at the southern end of Clyman Bay between the Union Pacific Railway and several existing ponds.

The operations would require diesel pumps to transport brine. More than 14,000 cubic yards of fill would be discharged into Bear River Bay and Cayman Bay to create dikes. Approval would allow the company to expand its operation to an area the size of Salt Lake City, about 119 square miles, or 7 percent to 13 percent of the lake's surface depending on water-level cycles.

Company spokeswoman Peggy Landon says the corporation plans to spend $25 million over three years to increase capacity at the plant, which processes sulfate of potash - an organic potassium fertilizer - into fertilizer. The company also creates salt products and claims the expansion is needed to avoid importing raw potassium from other sources.

The protesting organizations include the Utah Audubon Council, Friends of the Great Salt Lake, Utah chapter of the Sierra Club, League of Women Voters, The Nature Conservancy of Utah, Utah Airboat Association, Utah Rivers Council and Utah Waterfowl Association.

The Western Hemisphere Shorebird Reserve Network, a multinational conservation coalition, disputed a Forestry Division statement that the birds would adapt to the expansion.

In a September letter to Department of Natural Resources executive director Mike Styler, Marshall P. Jones, Jr., the Shorebird Reserve Network's hemispheric chairman, said such an assumption defied current scientific understanding of the breeding and ecology of migrant birds.

The Army Corps of Engineers expects to complete a draft EIS by fall 2008.

phenetz@sltrib.com

The U.S. Army Corps of Engineers will hold three public meetings before preparing a draft environmental impact study of an expansion proposal by Great Salt Lake Minerals Corp. of Overland, Kan. The minerals company, which makes fertilizer and salt products, wants to expand onto 33,000 acres of Great Salt Lake shoreline in Box Elder County. The meetings will be from 5 p.m. to 9 p.m.

* **Wednesday:** South Davis Junior High School, 298 W. 2600 South, Bountiful
* **Thursday:** Ogden Nature Center, 966 W. 12th Street, Ogden
* **Nov. 14:** Airport Inn Hotel, 2333 W. North Temple, Salt Lake City
* **For more information:** www.epa.gov/fedrgstr/EPA-IMPACT/ 2007/November/Day-01/i5437.htm

The Salt Lake Tribune

http://www.sltrib.com

Plan manages Colorado River in drought

SLC hydrologist says the arrangement means 'everyone shares the pain'

By Patty Henetz
The Salt Lake Tribune
Salt Lake Tribune

Article Last Updated:11/03/2007 12:25:59 AM MDT

The Law of the River has gotten another adjustment with a federal plan to manage the Colorado River during dry years.

The U.S. Bureau of Reclamation on Friday released a final environmental impact study that could be a way to avoid renegotiating an 85-year-old agreement based on inflated notions of how much water really is in the river.

Or, according to river advocates, the plan that will govern use and allocation through 2026 could be a way to ensure none of the seven Western states that share the river ever has enough water.

The study's conclusions drew from a consensus decision by the seven Western states that depend on the Colorado River on what to do during low-water years, officials said.

"This is an arrangement for operating the river where everyone shares the pain when you're going through a drought time," said Tom Ryan, a Bureau of Reclamation hydrologist in Salt Lake City.

The Bureau of Reclamation began the environmental study in 1999. Since then, the river basin has experienced the worst drought in 100 years of recorded history, and its two largest reservoirs - Lake Powell and Lake Mead - have gone from being nearly full to just over half-full.

The report, expected to be final in December, plans how the upper basin states - Utah, Colorado, Wyoming and New Mexico - will respond to demand from California, Arizona and Nevada, the lower basin states, which have more people and older water rights.

While the Bureau of Reclamation implicitly acknowledges that the 1922 Colorado River Compact is based on estimates from unusually wet years and its report assumes ongoing shortages, it doesn't suggest any changes to the agreement.

"Nobody wants to renegotiate the compact. The feeling is the compact provides an adequate framework for managing the river," Ryan said.

But to John Weisheit, conservation director for the non-profit organization Living Rivers, the bureau's solution entrenches wastefulness and refuses to acknowledge ways to store water more effectively.

"We're extremely disappointed," he said. "Now we're playing this balancing act between two reservoirs that climate change is going to keep empty."

Living Rivers has long campaigned to decommission the Glen Canyon dam and rely on Lake Mead for surface water storage. The organization also believes using aquifers in Arizona and California to store water underground would be a better solution. But the main problem with the bureau's solution is there's not enough water, which speeds destruction of the river ecosystem, Weisheit said.

phenetz@sltrib.com

Standard-Examiner

Story View (News)

Ogden pumps $51.6M plan

Friday, November 2, 2007

By Scott Schwebke
Standard-Examiner staff
sschwebke@standard.net

City council hopes to OK scenario this year for water system improvements

OGDEN -- After reviewing a flood of data, the city council decided Thursday night to pursue a scenario that includes $51.6 million in financing to upgrade Ogden's antiquated water system.

The scenario was among three options considered by the council during a work session to review results of a $67,000 draft study completed by Lewis, Young, Robertson and Burningham, a Salt Lake City consulting firm.

The city council plans to present the scenario to the public during a meeting later this month and may adopt the option by the end of the year.

The scenario calls for the issuance of $51.6 million in bonds next year to complete all necessary water distribution and sewer projects, purchase equipment to correct water odor and taste problems and partially fund stormwater projects.

It does not provide any funding to repair the city's water treatment plant.

Under the scenario, residents without secondary water who use 1,500 gallons would see their monthly water bills increase from $8.97 to $13.09 during the first year.

Bills for residents who use 6,500 gallons a month would increase from $14.35 to $19.29 a month, while rates for those who use 30,500 gallons would jump from $48.07 to $61.38 a month.

John Patterson, the city's chief administrative officer, said while the $51.6 million price tag for the scenario is a "huge chunk" of money, it would help address some of the city's most critical water infrastructure problems.

"It's a good start," he said. "It moves us forward."

Councilman Rick Safsten said the option does not include "any kind of luxury," but he seemed satisfied it would helping alleviate some pressing infrastructure problems.

The option was chosen by the city council over another proposal that called for $98.2 million in bonding in 2008 to complete all of the city's water projects, including repairs at the treatment plant.

The council also decided against a third scenario that called for $51.6 million in bonding next year and the issuance of $46.6 million in bonds in 2011 to upgrade the plant.

The study presented to the city council states that neither the city's water, sanitary sewer nor storm sewer rates produce

enough revenue to sustain its infrastructure.

The rates also do not generate enough revenue to pay for the daily costs of producing water and sewer services for customers, the study says.

The city has borrowed from other funds to repair broken systems and pay for operational costs in its sewer fund, the study states.

Insufficient monetary reserves has resulted in the city using "stopgap measures" to address some of its infrastructure needs, according to the report.

"This practice has caused a difficult cycle in which structures need replacement more often," the report says, "thereby costing the city more money in the long run."

Nation's roadless rivers are in serious jeopardy
By Rebecca Giddens and Mark Singleton
McClatchy-Tribune
Article Last Updated: 11/01/2007 10:26:06 PM MDT

Paddling a river is an ancient activity - possibly the first human mode of transportation not involving putting one foot in front of the other. Yet while the world has grown since people first took to the water, there are still some places in our country where you can dip a paddle into a pristine river, feel the tug of the current and silently glide downstream. And thanks to the roadless areas found in our national forests, there are more such havens than most would expect.

Unfortunately, roadless areas occupy a legal netherworld where they are neither easily developed nor really protected. Even worse, efforts to weaken protections for these last undeveloped places, by the Washington allies of mining and logging interests, have put these regions in serious jeopardy. Leaders in Congress, however, have kicked off a renewed effort to protect such natural treasures once and for all.

Paddling remote rivers and waterways - the original highways used to explore our great nation - offers a unique way to experience our national forests and some of the last vestiges of wild and unspoiled lands in America. Roadless areas are home to some of the most scenic and challenging whitewater around, as well as family-friendly rivers and lakes.

Roadless areas, frequently located at lower elevations than wilderness areas, provide accessible backcountry recreational opportunities for millions of Americans. For example, roadless areas in North Carolina's Smokey Mountains, the White Mountains of New Hampshire and West Virginia's Highlands provide world-class paddling opportunities. Out west, roadless areas preserve the water quality for headwater areas of the famous "River of No Return," Idaho's Salmon River.

One of the premier rafting and kayaking rivers in the world, the Salmon River, is not only a magnet for paddlers but home to 70 percent of all salmon and steelhead habitat in the entire Columbia River Basin. And in the Southwest, roadless areas in the Sequoia National Forest safeguard the headwaters of the Kern River - an important recreation spot for thousands of visitors each year and an invaluable source of clean drinking water for millions of Californians.

But the ability for future generations to enjoy the paddling, rafting, fishing and many other such backcountry recreational opportunities in these areas lies in serious jeopardy.

Over the last seven years, cynical partisan politics has taken priority over protecting our roadless forests. In California, despite promises to Gov. Arnold Schwarzenegger to halt new roadbuilding, the Forest Service recently announced new management plans for the Padres, Angeles, Cleveland and San Bernardino forests that would open the forests to new roadbuilding.

A similar story can be found in Idaho, where mining interests have employed loopholes to clear the way for phosphate exploration and mining, devastating roadless areas within the Caribou-Targhee National Forest. This project could replace once pristine backcountry with toxic settling ponds and strip mines - hardly a spot for a family trip down the river.

But now, members of Congress from both sides of the aisle are working together to ensure that America's natural heritage will be preserved for future generations of paddlers, bikers, climbers, backcountry skiers and hikers.

This year, more than 140 members of Congress, Democrats and Republicans alike, joined together to introduce legislation that would provide permanent protection for 58.5 million acres of pristine forestland in 39 states. This bipartisan initiative in the House was joined by a companion measure in the Senate, introduced with the support of 18 original co-sponsors.

Constructing new roads in wild forests, where the very absence of roads is their defining resource value, doesn't make sense. Roughly 85 percent of all the revenue generated from our national forests comes from recreation activities. Yet, while a gym or city park can easily be rebuilt or repaired, once a roadless area is opened to logging, mining and road building, the damage can never be undone.

Responsible management of America's natural heritage is a value that cuts across both sides of the political aisle and unites us in a shared legacy of stewardship. It's time to protect these last vestiges of our nation's past before it's too late. The joy of paddling along a pristine river, far from any automobiles or other reminders of modern life in America, is an experience that we should not allow to become extinct.

---

* REBECCA GIDDENS lives in Kernville, Calif. She won the silver medal in slalom kayaking at the 2004 Summer Olympics. Readers may send her e-mail at RebeccaGiddenscs.com.

MARK SINGLETON is the executive director of American Whitewater. Readers may send him e-mail at markamwhitewater.org. They wrote this for National Environmental Trust.

The Salt Lake Tribune
WEDNESDAY, October 31, 2007

Matheson's water bill gets good word in pan

Official says measure is vehicle to make water saving a national issue

By Thomas Burr
The Salt Lake Tribune

Article Last Updated: 10/31/2007 01:44:22 AM MDT

WASHINGTON - Southwestern Utah is so arid, a water official joked, even the desert tortoises carry canteens.

That's why it's important to promote water conservation and to make such a program national in scope, Ron Thompson, general manager of the Washington County Conservancy District, testified before Congress on Tuesday.

And the vehicle for doing that, Thompson said, is a bill sponsored by Rep. Jim Matheson, a Utah Democrat whose district includes many of Utah's desert areas.

Click pho

Jim Matt
Lake Trib

Water is vital to civilization, Thompson said. "It is in fact the lubricant that allows our economy to thrive."

Matheson's bill, which got its first hearing before a subpanel of the House Science and Technology Committee, would direct the Environmental Protection Agency to launch a research, development and demonstrati water-use efficiency. It also says the EPA should collect and share information on tec efficiency.

Thompson says that's key to preventing waste out of a dwindling natural resource. Earth's surface is covered with water, less than 3 percent is fresh water and less than for human use.

"In the long-term to be successful, you really have to educate," Thompson said. "Pe they're educated."

Other panelists spoke of different techniques for saving water, from using rain-wat capturing water from oil a The latter isn't part of the would look into it.

- Utah County delays vote on kids' museum
- Mayoral debate surprise: Could it be a beautiful day in the 'Gayborhood'?
- At $8.4M, school voucher fight costlier than last governor's race
- Voucher issue hits home stretch
- Paul Rolly: Vouchers camp spins news show
- Jailhouse statement: Polygamous leader said God considered him to be a 'wicked man'
- Development, housing at issue
- Council challengers allege poor decisions
- Public-safety bond gathers supporters
- 93 sign House letter urging ban on off-highway vehicles in Utah wilderness
- 2 of 3 Midvale seats put in play
- Candidates tackle growth and retail
- Diplomacy expert: Times are tough abroad, but don't despair
- Utah Guard veteran retires after 32 years
- State seeks a protective designation for rare bird
- Growth issues at forefront for Draper council hopefuls
- Suspected driver of shooter ordered to stand trial
- S.L. County Council pledges sales-tax revenues for commuter rails
- Corroon's budget leans toward green
- Officers cleared in fatal Ogden shooting during raid at home
- Diver drowns in Panguitch Lake
- For the Record
- Document details Jeffs' controversial jailhouse statement
- Document drops

"I'm certainly open to si

In Thompson's case, W fastest growing populatior more than doubled in size in the past 11 years, the cc use has decreased by 24 p hoping to achieve an addi by setting new conservatic

Matheson's bill will nov committee.

tburr@sltrib.com

Return to Top

RECENT COMMENTS:

Be the first to comment on this article.

POST A COMMENT | REGISTER | TRIBTALK.COM

Article published Oct 31, 2007

Water focus of new bill

By KATIE OLIVERI
koliveri@thespectrum.com

ST. GEORGE - Rep. Jim Matheson, D-Utah, has introduced legislation regarding water conservation and on Tuesday, the Energy and Environment Subcommittee of the House Science and Technology Committee conducted a hearing to receive testimony on the bill.

Witnesses included Ron Thompson, general manager of the Washington County Water Conservancy District.

The Water-Use Efficiency and Conservation Research Act calls on the Environmental Protection Agency to work with non-governmental partners to achieve a national goal of water conservation, according to a press release from Matheson's office.

Matheson's legislation establishes a research, development and demonstration program within the EPA's Office of Research and Development, the release said, and currently, that office has a $595 million budget.

The program would collect and publish information on current water-use efficiency technologies, according to the release. The bill also requires the ORD to carry out at least four demonstration projects for use in a model home and a model commercial building.

Matheson said Tuesday he wrote the bill because learning to use water more efficiently is an important issue for Utah.

First, he said, the legislation sets up a research effort to come up with "better ways to use water more efficiently and conserve water."

Second, Matheson said, it creates sort of a clearinghouse for people to share information in one place, where all local communities can share what they're doing and learn from each other.

The purpose of Tuesday's hearing was to evaluate the need for research and development of technologies and processes to enhance water-use efficiency and water conservation, according to a House Science Committee legislative staff memo. The committee also will ascertain perspectives on current federal efforts to promote water-use efficiency and conservation through programs such as the WaterSense program of the EPA, the memo said.

Last year, the EPA created a voluntary program called WaterSense, which focuses on educating consumers about smart water choices to save money and maintain environmental standards, according to the release from Matheson's office.

Thompson said Tuesday before the hearing he will stress in his testimony that education is critical as well as technology when it comes to water conservation.

"We've seen a lot of strides in conservation because of better technology," Thompson said.

He said Washington County has had about a 24 percent reduction per capita in water use since 1995.

Thompson also said the Washington County Water Conservancy District was the first district in Utah that adopted a water conservation plan and also the first Utah district that entered into a partnership with the EPA for the WaterSense program.

"We all have a role to play in water conservation," he said.

Matheson's bill, Thompson said, adds more money into research.

Matheson, who attended Tuesday's hearing, said the science committee will look to pass the bill in February.

"I think people are real enthusiastic about the bill," Matheson said of the witnesses at the hearing and of the science committee. "I felt really good about the hearing."

CLICK HERE to print this page

ksl.com

Ogden Residents Complain About Smell, Taste of Tap Water
October 29, 2007

Whit Johnson Reporting

It has a foul smell and tastes disgusting, at least during a few months of the year. That's the complaint from Ogden residents regarding their tap water. Mother Nature may be to blame, and the city is looking for solutions.

It's fresh tap water straight from the western edge of the Rocky Mountains. Despite the lush landscape from which it originates, residents say it's just stinky.

For several months of the year, the drinking water in Ogden has a flavor you can't quite put your palate on.

Resident Bruce Gardiner compares it to "dirt? Dirt maybe. I don't know."

The taste is so bad Gardiner won't drink it from the faucet.

"I always go to the fridge, and I've got a filter on that," he said.

He is not alone.

Ogden City Engineer Kimball Wallace said, "This year we probably had ten times the normal number of phone calls."

Wallace says during the months of August and September complaints from the public were higher than ever.

"We're anxious to resolve the odor and taste problems," he said.

So what's causing the stink and awful taste? Experts say it's low water levels and algae built up at Pineview Reservoir.

"If you could have a little more snow pack, that would resolve the problem," Wallace said. "If we had less 100-degree days, we wouldn't have a problem with the high temperature and the turnover in our algae. So this is proportionate to our weather."

Ogden is exploring several options.

"We have the ability to put chemicals into our water treatment plant that can take out that odor and taste, but they're very expensive," Wallace said.

Expensive, but for some it might just be worth it.

Ogden City Council is considering an upgrade to its utilities system that would cost about $50 million. That would include the cost to address the odor and flavor

issues.

City officials insist most months of the year Ogden's water actually tastes pretty good. They also say the water poses absolutely no threat to the public health.

The Salt Lake Tribune

TUESDAY, October 30, 2007

Used water

Public Forum Letter

Article Last Updated: 10/29/2007 01:45:31 AM MDT

It is estimated that Utah's population will double by the year 2050, and the demand for clean water will increase.

As part of the conservation effort, government officials need to put more focus and resources on the reuse of reclaimed water wastewater). Reuse can help the state meet the water supply and wastewater management demands of a growing population.

Reuse helps conserve potable water supplies since the reclaimed water is used in place of potable water for certain purposes, watering golf courses. More and more communities across the country are turning to reuse of reclaimed water as a way to mana water needs.

Mark Katter
Midvale

- **Romney is big on apologies - unless it's his own mistake**
- **Dowd: Vice President Cheney: Are there WMD in Iran?**
- **Acts of God and humanity**
- **Goldberg: The Bjorking of American politics**
- **A workout for dubious lenders**
- **Krugman: The subprime lending mess was a catastrophe foretold**
- **Mary Dickson's angry memorium for the downwinders**
- **Students gain nothing from Jordan School District split**
- **Rolly: Huntsman's tepid support for vouchers may bring him challengers**

Letters

- **If thine eye . . .**
- **Kill the vampire**
- **Try McDonald's**
- **Stop the world**
- **Brought to you by . . .**
- **A bully gully**
- **Siphoning off**
- **Right to choose**
- **Turner endorsement**
- **Underdog**
- **Jews and Darfur**
- **Used water**
- **Voucher constitutionality**

Return to Top

RECENT COMMENTS:

10/30/2007 9:06:00 AM -- Treated wastewater? Eew. Well, at least it's better than Magna water. **[MORE]**

10/30/2007 6:17:00 AM -- Why do churches need to have so much lawn around their buildings? **[MORE]**

10/30/2007 6:03:00 AM -- used water for ds7's golf course? ARE YOU NUTS??? **[MORE]**

READ ALL 6 COMMENTS | POST A COMMENT | REGISTER | TRIBTALK.COM

Was this artic worthwhile?

+9
9 VOTES

Article published Oct 31, 2007

Water focus of new bill

By **KATIE OLIVERI**
koliveri@thespectrum.com

ST. GEORGE - Rep. Jim Matheson, D-Utah, has introduced legislation regarding water conservation and on Tuesday, the Energy and Environment Subcommittee of the House Science and Technology Committee conducted a hearing to receive testimony on the bill.

Witnesses included Ron Thompson, general manager of the Washington County Water Conservancy District.

The Water-Use Efficiency and Conservation Research Act calls on the Environmental Protection Agency to work with non-governmental partners to achieve a national goal of water conservation, according to a press release from Matheson's office.

Matheson's legislation establishes a research, development and demonstration program within the EPA's Office of Research and Development, the release said, and currently, that office has a $595 million budget.

The program would collect and publish information on current water-use efficiency technologies, according to the release. The bill also requires the ORD to carry out at least four demonstration projects for use in a model home and a model commercial building.

Matheson said Tuesday he wrote the bill because learning to use water more efficiently is an important issue for Utah.

First, he said, the legislation sets up a research effort to come up with "better ways to use water more efficiently and conserve water."

Second, Matheson said, it creates sort of a clearinghouse for people to share information in one place, where all local communities can share what they're doing and learn from each other.

The purpose of Tuesday's hearing was to evaluate the need for research and development of technologies and processes to enhance water-use efficiency and water conservation, according to a House Science Committee legislative staff memo. The committee also will ascertain perspectives on current federal efforts to promote water-use efficiency and conservation through programs such as the WaterSense program of the EPA, the memo said.

Last year, the EPA created a voluntary program called WaterSense, which focuses on educating consumers about smart water choices to save money and maintain environmental standards, according to the release from Matheson's office.

Thompson said Tuesday before the hearing he will stress in his testimony that education is critical as well as technology when it comes to water conservation.

"We've seen a lot of strides in conservation because of better technology," Thompson said.

He said Washington County has had about a 24 percent reduction per capita in water use since 1995.

Thompson also said the Washington County Water Conservancy District was the first district in Utah that adopted a water conservation plan and also the first Utah district that entered into a partnership with the EPA for the WaterSense program.

"We all have a role to play in water conservation," he said.

Matheson's bill, Thompson said, adds more money into research.

Matheson, who attended Tuesday's hearing, said the science committee will look to pass the bill in February.

"I think people are real enthusiastic about the bill," Matheson said of the witnesses at the hearing and of the science committee. "I felt really good about the hearing."

Article published Oct 28, 2007

Water key in area elections

RYAN DIONNE
rdionne@thespectrum.com

CEDAR CITY - It's no surprise to Southern Utah residents that water is a pretty big deal.

Lack of it. Conserving it. Buying it. Wasting it. It all impacts the community.

Water is one of the most abundant resources on the planet, but not in this part of the world.

As the area grows, residents have asserted that city council members must look to the future and discuss ways to keep those living in the Cedar City area from using more water than the area can supply.

Whether it's the Lake Powell Pipeline project, more hefty conservation or reuse of available water sources, Cedar City Council candidates were asked to share their thoughts on these and other water conservation and usage issues.

These are the responses from Dale Brinkerhoff, Rich Gillette, Raymond Green, Kasey Musto, Georgia Beth Thompson and Steve Wood listed in alphabetical order by last name.

TS & DN: What should the city council's role be regarding water?

Brinkerhoff:

"Everything in Cedar City revolves around water. There isn't anything more important to Cedar than water, so the city's role is to promote, develop and maintain an adequate supply of clean drinking water."

Gillette:

"They just need to be directing staff and keeping (updated on) new water rights that are available. We just gotta stay ahead of the curve with the need."

Green:

"The city council ought to make sure we have conservation procedures in place. The council also should look into all ways and places to store water and increase reclamation."

Musto:

"I think that they should be the ones to begin the process to really push the process to look into ways to reuse, recycle and reclaim our water. Water reclamation facilities - they need to look into that."

Thompson:

"I think we ought to be working with city staff and others to make sure we have adequate water for growth in the community." We also need to find programs and ways to be more judicious with water usage.

Wood:

I think buying or leasing water rights from farmers in exchange for letting them use recycled water after it's treated solves short-term goals. "I think it's a win-win both ways."

TS & DN:

How are you prepared to deal with that?

Brinkerhoff:

"We don't have water to waste, but we have an adequate supply of water at this time." By continuing to develop wells before we need them will provide enough water for growth as long as the wells don't become dry.

Gillette:

"Investigate the need and forecast the need. You do that by having the right kind of people around you." Figuring out how to reuse the water and stretch our rights more than we do now is key.

Green:

"One of the key things that has to be done is to take a look at the general plan and the land use element of the general plan and determine what is the max build out." The potential future population will then determine how much water is needed.

Musto:

"They should look to other areas throughout the United States that have similar water issues." Then use those as an example of how we can reuse, recycle and reclaim our water.

Thompson:

Once we find more sources of water and find which works best for Cedar City, it's a matter of evaluating which is best and figuring out where to go from there. Now, too many areas are drying up without being recharged.

Wood:

I think the city would have to put some trust in the private company doing the grey water study because they've done it in other communities and I think it would be the best option both financially and otherwise.

TS & DN:

How should it be paid for?

Brinkerhoff:

All customers should have to pay for it, and they are now. Impact fees pay for new water and taxes help pay for maintenance. "It's adequate until such time that we have to make a decision on the pipeline. For the moment we're where we oughta be."

Gillette:

"Whoever's using the water needs to pay for (the rights). "The city collects fees every time somebody connects to the system. There's also a water impact fee every time a new home is built."

Green:

Impact fees are only used for new water infrastructure, and now that construction growth has slowed, impact fee revenue will be less. "Your

options are to slow down the rate of growth or increase taxes to make it happen - which we don't want."

Musto:

The city should research new ways to reclaim water. "They do have a water plan, and in that water plan there should be some funds set aside specifically for research and development."

Thompson:

How it's paid for depends on what route the city decides to take on the issue. Bonds, fees and taxes are an option, but the city should look for support from grants and other government agencies for help too.

Wood:

"If we have as much growth as we're gonna have ... you're gonna pay for it with, frankly, bonding or impact fees. I think what we don't need in this community ... is increases in property taxes."

CLICK HERE to print this page

ksl.com

Biologists Study Fish in the Provo River
October 15, 2007

Sam Penrod Reporting

Fish in the Provo River had a shock today. The Division of Wildlife Resources uses electrical shocks to measure how many fish are in the river and to check how healthy they are.

The Provo River remains one of the most popular fishing areas in the state, attracting people from all over to enjoy the its beauty. "This is one of the most popular stream fisheries in the state. If you look at the number of anglers per mile, it's as high as any river I could find in the West," said Richard Hepworth, aquatics biologist with DWR.

And to make sure there are plenty of fish for anglers to catch, the state DWR takes samples in the river. To do this, the biologists send an electrical current into nets, which helps them catch the fish and examine them. "It creates an electric field in the water. That temporarily stuns the fish, [and] gives us the opportunity to net them up until we can weigh and measure them and release them back into the river," Hepworth explained.

KSL News was with the biologists as they took two samples, one just below the Jordanelle Dam and the other along the river in Midway.

"This process helps to answer several questions, from how many fish are in the river, are they healthy, what size are they, are there enough, what types of species are they seeing, and is there a good balance of species in the river and fish sizes?" Hepworth said.

It's the kind of information that anglers who fish the river want to know too. "I'd be curious to know what kind of fish, how big they are. I sometimes catch two to three fish when I come," angler Kristin Egan said.

In all, the biologists are encouraged by what they found: some really good-sized fish. They will analyze the data collected today and then be able to come up with some population estimates for the river.

The Salt Lake Tribune

http://www.sltrib.com

Rate hike to leave bitter taste in Ogden

By Kristen Moulton
The Salt Lake Tribune
Salt Lake Tribune

Article Last Updated:10/24/2007 12:58:33 AM MDT

OGDEN - Ogden residents will be asked to swallow huge increases in their water rates next year, but it's possible one of their biggest complaints - that the water stinks and tastes bad during summer - may not get fixed anytime soon.

The City Council debated Tuesday night the ramifications of holding up the Water Horizons Rate Study while city engineers study what it would take to fix problems at the plant that filters water from Pineview Reservoir.

"The state may say it's safe, but it's unacceptable. It stinks. It literally stinks," said council member Amy Wicks. "It smells like taking the lid off my aquarium."

The council embarked on its Water Horizons project, with a heavy emphasis on getting community buy-in, last summer, and had hoped to finish the study by the end of the year.

The study is to identify the most pressing needs in Ogden's antiquated water, sewer and waste-water systems, come up a price tag and figure out how much to raise rates.

That timetable is now in jeopardy because the city's public works and water engineers are just beginning to research ways to fix the filtration system.

Replacing the filtration plant and pipe to Ogden - a possible $46 million expense - wasn't on the list of projects brought to the table by city administrators.

But citizens are complaining about the bad taste and smell of the water and the low water pressure, Wicks said.

The council decided Tuesday to keep rate study consultants working but held off setting dates for future public meetings.

Mark Johnson, the city's management services director, said the administration considered the filtration plant problems to be less pressing than other infrastructure needs.

This past summer's stinky water was an anomaly that had to do with scant summer rains and the fact that Willard Bay Reservoir was closed, pushing more boaters to Pineview Reservoir, he said.

Mayor Matthew Godfrey has called the council's rate study as unnecessary.

kmoulton@sltrib.com

Close Window | Send To Printer

DESERET Morning News

Mona leaves family high, dry

City cuts off their water in dispute over connection

By Jens Dana
Deseret Morning News

Published: October 23, 2007

MONA, Juab County — The past few nights have been restless ones for Tom Spotten.

He'd nod off every once in a while, but he'd quickly jolt awake, wondering if city officials were serious about cutting off the water to his house.

"Are they really going to do it?" he'd ask himself.

Monday afternoon, they did.

The Spotten family, which lives just outside the city boundaries, has had quarrels with Mona over water rights since 1984 when the city built a new water line and bypassed the Spotten home.

Tom Spotten said the city eventually allowed him to connect, but only after he signed a liability disclaimer because his water connection was above the chlorinator. The family continued to pay its water bill until 2002, when the city refused payment because city officials were told they couldn't charge for untreated water.

The issue came to a head Sept. 22 when the Utah Department of Environmental Quality deemed the Spotten family's water line a potential health hazard. Mona city officials also say the water line was illegally connected to the city system, so they decided to shut off the water on Monday. Now the house is without water. "We're high and dry, literally," said Tom Spotten, who underwent a back surgery that requires him to use a wheelchair.

Ken Bousefield, director of the Utah Division of Drinking Water, confirmed the Spottens' water line could be a potential hazard. But he also said a double-check valve would be a satisfactory, interim remedy while the Spottens and the city reached an "amicable resolution."

Some long-term solutions he mentioned included connecting their water line below the city chlorinator or installing an alternate chlorinator on the existing connection.

The Spottens tried to present the temporary remedy and pled their case Oct. 9 at a City Council meeting. But Mayor Bryce Lynn cut Karen Spotten off in mid-sentence, and the City Council voted 3-2 to proceed with the disconnection.

Lynn said Mona severed ties with the Spotten family in 1984 when it built the new city water line. He believes Tom Spotten connected his water line to the main line without permission and is "guilty of theft of services," he said.

Tom Spotten denies Lynn's allegation. He says Greg Newton, the Mona mayor at the time, stood by and watched him attach to the main

line. Karen Spotten added that the city had to know about the connection because the family paid nearly $5,000 in water bills between 1984 and 2002.

Lynn said Monday that city officials were disconnecting the water line under direction of the Utah Department of Environmental Quality because the Spotten water connection creates "negative pressure" that could suck bacteria into the city water system.

"It's just gotta be done," Lynn said. "That's it."

Around 2 p.m., a Juab County sheriff's patrol car pulled up to the head of the Spottens' water line, and the distant rumble of a backhoe could be heard down the road.

As Mona water master Allen Pay dug six feet deep to disconnect the water line, Tom Spotten said he put on a tough face for the sake of his daughter, Jennifer, who has a heart condition. As a father, he said, he knows a parent's reaction has an impact on a child's health.

Lynn came and watched as Pay shoveled through the dirt. The Spottens said they tried to talk to him, but Lynn avoided them.

"That's the kind of mayor we have," Karen Spotten said. "If he feels what the (water) board did is right, why is he avoiding us?"

Eventually, the Spottens returned to their home and started filling their hot tub so they would be able to flush their toilet after the line was cut. They also filled their bathtubs, water jugs and the family camper trailer so they can shower.

Lynn said he feels like the Spottens unfairly singled him out when it was the City Council that voted 3-2 on Oct. 9 to proceed with the disconnection.

"I didn't even vote," he said. "And I'll always be known as the crook who took their water."

The Spottens said they felt the city showed no compassion for their situation. City Attorney Karen Fenton said city officials gave the Spottens several notices informing them they had an illegal connection.

"The city has been more than patient in trying to get them to do what everybody else outside the city does, which is dig a well," she said.

As Mona resident Michael Keith watched the backhoe rip through the dirt, he said he was upset with how city officials handled the water dispute.

"I think this is dead wrong," he said.

Later in the afternoon, Keith, a friend of Tom Spotten's for about 20 years, stopped by the Spotten residence to reassure them that friends wouldn't abandon them.

"There will be water," he said.

E-mail: jdana@desnews.com

River protection overdue

Many of Utah's 'wild' and 'scenic' rivers are in the Uinta Mountains

Patrick Parkinson, Of the Record staff
The Park Record

Article Launched:10/16/2007 04:16:42 PM MDT

Fly fishermen teamed with the Utah Rivers Council to visit the Uinta Mountains to survey which rivers should enjoy protection fi the federal government.

From bluish sections of the Provo River that stretch along the Mirror Lake Highway, to swift, remote parts of the Weber River ai Blacks Fork that remind even the most seasoned fly fishermen of passages from "A River Runs Through It."

Rivers must have local or regional significance, be free flowing and exhibit "outstandingly remarkable" natural, cultural or recreational traits to qualify for protection from the Wild and Scenic Rivers Act.

Kamas District Ranger Cathy Kahlow said a stretch of the Upper Provo River, visible from the Mirror Lake Highway, is one of he favorite spots in the Wasatch-Cache National Forest.

"We went down to one portion of the Provo River where there are some beaver dams and also a lot of free-flowing water that tl fishermen were enjoying," Kahlow said about a group of roughly 10 people who fished in the Uintas with the Utah River Council week.

Rivers in Utah that she says are second to none, so far, have eluded garnering protection from the federal Wild and Scenic Rive of 1968. Perhaps because Utah is one of the driest states in the nation, Kahlow said.

"There are a lot of rivers that people are depending on for reservoir development," she said. "It can be contentious in some res because water is so precious that some people would rather see it available for them to use in a consumptive way, for drinking.

Fly fisherman Steve Schmidt, who owns Western Rivers Flyfisher in Salt Lake City, said he never tires of fishing in the Uinta Mountains east of Kamas. The Ohio native has been fly-fishing since he was nine years old and joined Kahlow on the trip.

"I used to be up there every weekend There are 600 fishable pieces of water up there," Schmidt said. "When you come from Ol and you drive into the Uintas, your jaw drops. To see wild fisheries and self-sustaining fisheries, I was kind of overwhelmed by

Now development, which could include timber harvesting and oil exploration, could threaten those rivers, he explained, adding one of the greatest challenges faced by the fishing industry is the degradation of rivers and streams.

"The Rockies are the fastest growing area in the country," Schmidt lamented. "At some point in time it will be too late."

He is most comfortable fishing rivers in remote areas of the Uintas avoided by weekend warriors but impacted by drought, Schi said.

"These are the root and source of resources that we desperately need to sustain our own lives and there are some real concern said.

Rivers are classified for protection by the federal government based on their wild, scenic or recreational values. Wild rivers sho evidence of any development with access only via trails, officials say.

Among the rivers in Summit County that could be designated as wild are Henry's Fork, Thompson Creek, East Fork Blacks Fork, Ostler Creek, Boundary Creek and the Middle Fork of the Weber River. Rivers including West Fork Smiths Fork and Stillwater Fc could earn designations as scenic rivers.

But the proposal is controversial, Kahlow said.

"Local community dependence on water is something the decision-makers are going to look at strongly because the state is dry people need water to live," she said. "We would not have any jurisdiction over private land or existing water rights."

Many river segments in Utah that could receive federal protection are in Summit County.

The Wild and Scenic Rivers Act was drafted 30 years ago to counter rapid construction of dams in the United States, said Mark Danenhauer, river solutions coordinator for the Utah Rivers Council.

"The U.S. was on a dam-building frenzy," he said. "Most of our major rivers in the U.S. have dams on them."

Congress must act to designate a river as wild, scenic or recreational, he said.

"There are a lot of people who haven't been to these rivers," Danenhauer said in a telephone interview Tuesday. "What we try t with these trips is highlight the incredible rivers that we have in Utah."

The U.S. Forest Service plans to release a draft environmental impact statement in December, Kahlow said.

"Were narrowing it down from 86 rivers to different groups of rivers based on different kinds of attributes," she said, adding tha public can comment about the proposal in January.

Danenhauer called rivers "the lifeblood of the land."

"Everything ties in with the rivers," he said.

Protection from the Wild and Scenic Rivers Act stops further dam construction on rivers, Danenhauer explained.

Visit www.rivers.gov for more information.

The Salt Lake Tribune http://www.sltrib.com

6,700 endangered woundfin fish released into Virgin River waters

By Mark Havnes
The Salt Lake Tribune
Salt Lake Tribune

Article Last Updated:10/18/2007 06:40:12 AM MDT

LA VERKIN - Something a little fishy happened Wednesday on the banks of the Virgin River - with some little fishies.

Biologists released 6,700 woundfin into the turbid southwestern Utah river, the only body of water in the world where the tiny fish exists.

Before Wednesday's release, scientists believe, a mere 100 to 200 of the endangered species remained in the Virgin between La Verkin and the Utah-Arizona state line.

"It's important that these fish be planted," fish biologist Steve Meismer said. "It represents the ecosystem of the river working the way it is supposed to. There are not any real economic benefits, but the fish does let us know how healthy the river is, and that is important because if the river wasn't here, then none of us would be here, either."

Meismer is area coordinator of the Virgin River Program, a consortium of federal, state, local and private partners dedicated to balancing conservation interests with human needs.

Wednesday's release cost about $630,000 in money and in-kind services.

Meismer said the project has been funneling the woundfin into the Virgin since 2003. Then, last August, the population was nearly wiped out - for reasons not yet clear - after rain-spawned flooding.

The freed fish, which reach two to three inches in length, were trucked in from the U.S. Fish and Wildlife Service's Dexter National Fish Hatchery and Technology Center near Roswell, N.M. They were released near the Virgin's confluences with La Verkin Creek and Ash Creek.

Mike Golden, Virgin River fish biologist with the Utah Division of Wildlife Resources, said each woundfin was injected with a green dye strip that will identify when and where the fish were released if captured in the future as part of ongoing studies.

Golden cited several possible reasons for the species' decline, including nonnative predator species, decreased water quality and increased human use of the river.

Water levels from spring runoff also are crucial to reproduction, he said. "Eight years of drought haven't helped."

For Golden, it is a rare treat to see one wee woundfin - let alone 6,700.

"I worked all summer and never saw a woundfin," he said. "I'm thinking of having one tattooed on me so I can see one all the time."

mhavnes@sltrib.com

About the woundfin

* **Scientific name:** Plagopterus argentissimus.
* **Size:** 2 to 3 inches long.
* **Life span:** Two to three years.
* **Location:** Lives only in a section of the Virgin River in Washington County.
* **Diet:** Anything from insects to floating organic matter.
* **Listing:** Endangered since 1973.
* **Numbers:** About 100 to 200 in the wild until Wednesday's introduction of 6,700.

The Salt Lake Tribune http://www.sltrib.com

Restaurants join battle vs. bottles

By Mike Gorrell
The Salt Lake Tribune
Salt Lake Tribune

Article Last Updated: 10/12/2007 11:23:07 PM MDT

Utah restaurant chain Gastronomy Inc. lent its support Friday to Salt Lake City Mayor Rocky Anderson's campaign against bottled water.

The company formally pledged to continue serving municipal tap water rather than bottled water at its 11 Salt Lake Valley operations - four Market Street Grills, three Market Street Oyster Bars, The New Yorker private club and three Market Street Fresh Fish Markets.

Thomas Guinney, a Gastronomy partner and director of operations, said "we've been putting tap water on tables for 27 years," adding that the hospitality industry is embracing environmentally conscious practices for business as well as social reasons. "It's timely. Fresh is in. Buying local. Going green in all aspects now makes good business sense."

Gastronomy was not alone in endorsing the campaign, which features a Web site, www.knockoutwaterbottles .com, where people and businesses can sign an online pledge to avoid bottled water. It was joined by four other Salt Lake City restaurants: Cedars of Lebanon, Himalayan Kitchen, Hong Kong Tea House and Kwan's Downtown Chinese.

Cedars of Lebanon owner Raffi Daghlian said he never hesitated to join Anderson's effort to do away with plastic water bottles.

"I was a biology major, and I'm very environmentally conscious. I don't like to waste things, and these bottles are not biodegradable," he said. "When the mayor raised the issue, I was in agreement with him. I did not think twice before I signed it. Someone has to start caring. This is my business to reduce our impacts on this Earth. Every person makes a difference."

Patrick Thronson, communications director in the Mayor's Office, said Salt Lake City is among a number of American and Canadian cities cooperating on a continental campaign to "think outside the bottle."

These cities espouse the consumption of municipal culinary water, maintaining it is cleaner and safer.

"The whole goal is to encourage businesses and consumers to wake up and recognize the enormous, unnecessary, global-warming consequences that come from the production, transportation and disposal of bottled water," Thronson said.

The International Bottled Water Association on Wednesday disputed the allegations by Corporate Accountability International (CAI), which pushed the continental campaign supported by Anderson.

"The CAI campaign is based on factual errors and subjective viewpoints on bottled water and does nothing more than confuse and misinform consumers," said the association, which includes U.S. and international bottlers, distributors and suppliers.

"Bottled water is comprehensively regulated as a packaged food product by the U.S. Food and Drug Administration [FDA] and state regulatory agencies. The current system of bottled water regulation provides consumers with outstanding bottled water safety, quality and public health protection," the association added.

mikeg@sltrib.com

Mayor Rocky Anderson's "Knock Out Bottled Water" campaign contends:

* **1.5 million barrels of oil are required** annually to make plastic water bottles, using enough electricity to run 250,000 homes or 100,000 cars for a year.
* **U.S. consumers spent more than $11 billion** last year on bottled water, which per liter is more expensive than tap water and gasoline.
* **Making smaller water bottles** from PET (polyethylene terephthalate) can generate 100 times more toxic emissions than an equivalent amount of glass.

The Salt Lake Tribune http://www.sltrib.com

Water bottles disgust, but educate
The Associated Press

Salt Lake Tribune
Article Last Updated:10/15/2007 12:52:41 AM MDT

SYRACUSE - The water looks clear, but the label on the bottle tells a different story.

"Ingredients," notes the back side of the bottle's label: "Water, fecal matter, toilet paper, hair, lint, rancid grease, stomach acid and trace amounts of Pepto Bismol, chocolate, urine, body oils, dead skin, industrial chemicals (aluminum, copper, zinc, lead, chromium, nickel, molybdenum, selenium, silver arsenic, mercury,) ammonia, . . . soil, laundry soap, bath soap, shaving cream, sweat, saliva, salt, sugar. No artificial colors or preservatives. Some variations in taste and/or color may occur due to holidays, predominant cuisine preference, infiltra- tion/inflow, or sewer cross- connections."

The specially labeled bottle water comes courtesy of the North Davis Sewer District. Sewer-district manager Kevin Cowan hands out bottles (of actually clean, pure water) to those who tour its facilities.

Cowan says he's trying to make a point with the disgusting ingredients.

It's "a lesson about our environment . . . [about] being more conscious about what goes down the drain," he said.

Close Window Send To Printer

DESERET Morning News

'Sewer' water in a bottle — yum!

By Lynn Arave
Deseret Morning News

Published: October 14, 2007

SYRACUSE — The water appears crystalline and pure. The plastic container like any other water bottle you'd buy at the neighborhood market.

The label tells another story altogether.

It says: "North Davis Sewer District drinking water."

If that's not enough to give you pause, read on. This is not water from a fabled mountain spring. Nor is it a product of a soda pop conglomerate that claims the water has been double- or triple- or quadruple-purified.

Folks at the sewer district, says sewer-district manager Kevin R. Cowan, hand out bottles to those who tour its facilities. This "refreshing" humor is trying to make a serious, instructive point.

"We make them (visitors) think it is the treatment product," he said. "But it's also a lesson about our environment ... (about) being more conscious about what goes down the drain."

"This water originated as all-natural sewage collected through high-quality reinforced concrete sewer lines in the high mountain valleys of northern Davis and southern Weber counties," the label says in parody of many another water bottle.

"It was then processed using state-of-the-art screening, grit removal, sedimentation/flotation, biological oxidation, solids contact conditioning, and chlorine disinfection on the way back to you. This system is usually effective in removing up to 94 percent of biodegradable pollutants..."

Hmmm: 94 percent.

And that's a major point. What are you sending down the drain, hoping that the sewer district can remove it all before the water is returned to nature (and not, as you may be thinking, put into water bottles)?

"Ingredients," notes the back side of the bottle's label: "Water, fecal matter, toilet paper, hair, lint, rancid grease, stomach acid and trace amounts of Pepto Bismol, chocolate, urine, body oils, dead skin, industrial chemicals (aluminum, copper, zinc, lead, chromium, nickel, molybdenum, selenium, silver arsenic, mercury,) ammonia, ... soil, laundry soap, bath soap, shaving cream, sweat, saliva, salt, sugar. No artificial colors or preservatives. Some variations in taste and/or color may occur due to holidays, predominant cuisine preference, infiltration/inflow, or sewer cross-connections."

Cowan says: "It's all in good fun."

He said Jeff McFarlane, pretreatment coordinator at the plant, used similarly labeled bottled water as a tongue-in-cheek Christmas gift for

his neighbors last year, since they all know where he works.

Cowan said the district decided the bottles had promise as an inexpensive way to both have fun and promote water quality.

He said the public can help by not letting certain products swirl down the drain to end up in the sewer system, particularly paint, gasoline and household solvents.

Cowan said the sewer district recently completed an expansion project that has reduced pollutants by a couple of tons per day — ingredients that would otherwise have ended up in the Great Salt Lake.

Utahns are lucky that they are served by mountain water runoff. However, in places along the Mississippi River, for example, water is indirectly reused downstream.

So, really, it is not a stretch to think that former sewer-treated water could end up in the drinking supply.

As for the water inside the sewer district's bottles....

Layton Councilman Renny Knowlton, who represents the city on the sewer board, handed out the bottled water at a recent meeting. The response was tepid, to say the least.

"Ooh!" some people said. "Gross!" others exclaimed.

Then Knowlton suddenly uncorked a bottle and downed it to prove it really was pure water, a small matter clarified on the otherwise over-descriptive label. In blue print down the side it says:

"This bottle contains, pure, safe, drinkable water. Not a product of the North Davis Sewer District."

In other words — "Just kidding!"

E-mail: lynn@desnews.com

DESERET Morning News

Rocky slowing flow of bottled water

Campaign urges eateries to protect environmentSome lines here please. Some lines in here

By Amy Choate-Nielsen
Deseret Morning News

Published: October 13, 2007

To restaurateur Tom Guinney, drinking bottled water is as uncool as smoking in a crowded restaurant — and it's a fad that won't last long.

Guinney, an owner of the Gastronomy restaurant group, is one of several Salt Lake City business owners who have joined Mayor Rocky Anderson's newly launched "Knock Out Bottled Water" campaign and vowed not to sell bottled water at his establishments. Guinney says he thinks that soon a majority of restaurants won't sell "bottled tap water."

"This is not a vision of something that will take place in the next decade; (selling bottled water) is probably where smoking was in public restaurants and private clubs four or five years ago," Guinney said. "I speculate that in 36 months the consumption of (bottled water) sold in the hospitality industry will be half of what it presently is."

Anderson unveiled his new campaign — www.knockoutbottledwater.com — Friday morning, noting his involvement in a national movement to eliminate bottled water in lieu of tap water. The mayor is encouraging business owners and residents to commit to not selling or drinking bottled water and support others who have committed to do the same.

"The purchase of bottled water is absurd," Anderson said. "It is a sign, when we purchase bottled water, of our destructive consumerism. It is a reckless waste of public resources (not to use tap water), and when we purchase (bottled water) it is a waste of our own monetary resources as well."

Establishments who have committed not to serve bottled water will display a "Knock Out Bottled Water" decal, Anderson said. So far, 15 restaurants, which are listed on the campaign's Web site, have agreed to participate in the campaign. Anderson said a majority of restaurants have not yet responded to the campaign request, but some business owners have declined to participate.

"One club owner said 'no' because he can make money off of selling bottled water," Anderson said. "That seems pretty short-sighted to me."

Raffi Daghlian, who owns Cedars of Lebanon restaurant on 154 E. 200 South in Salt Lake City, says he decided to commit to the no-bottled water campaign because of the environmental impacts the industry can have.

According to the Sierra Club, nine out of 10 plastic water bottles are not recycled. Other opponents of plastic bottles say the amount of oil required to make enough bottles for the United States for one year is enough to generate enough electricity for 250,000 homes or fuel for 100,000 cars for one year.

"I saw some reports locally and internationally about the cause and this position, and I just didn't want to use those bottled waters anymore,

especially the plastic ones," Daghlian said. "We have to start somewhere, and a little bit here and a little bit there just adds up." Daghlian says he usually doesn't tell customers that the restaurant has bottled water available anyway, because he doesn't agree with the amount of energy it takes to make plastic bottles. The risk of losing revenue for not selling bottled water isn't a worry, Daghlian says.

"I have more of a conscience than a calculation of profits in my head, and everything is not about money," Daghlian said. "The greedier you get is not going to make you any happier. We can live with less."

E-mail: achoate@desnews.com

DESERET Morning News

Water-policy plan is in works

By Nicole Warburton
Deseret Morning News

Published: October 13, 2007

After a three-day conference this week in Salt Lake City on ensuring long-term water supplies in the West that are threatened by global climate change, members of the Western States Water Council plan to release a list of water policy recommendations to the governors of 18 states.

The list could include recommendations on how to deal with climate change, new policy on how to link researchers with state and local water bosses, and ways to get more money for research and implementation of water plans.

"We're going to try to influence policy," Duane Smith, chairman of the water council, said Friday at the close of the conference. "We're not going to sit here and just have a report that academicians think is such a great thing."

No time frame was given for release of the report. During this week's conference, information was gathered from attendees about possible changes in water policy. Conferencegoers included state, city and county leaders, as well as federal-agency and business leaders.

The subject of climate change was discussed during break-out sessions during the conference and also Friday during a closing brain-storm session. One attendee said he was concerned that water council leaders weren't listening to concerns from researchers about pollution and a warming Earth.

Smith said the council was aware of research about climate change, and his group would seek to push policy to link researchers with policy makers on state and local levels in order to foster changes.

"How can we provide a clearing-house for science that actually brings that into the water manager's scenario?" Smith asked. "In our recommendations, we will try to deal with that."

Smith said the 18 governors who will receive the recommendations are members of the Western Governor's Association, which appoints members to the water council.

E-mail: nwarburton@desnews.com

CLICK HERE to print this page

ksl.com

Bureau of Reclamation Helping Utah Companies Conserve
October 11, 2007

Jed Boal Reporting

Several million dollars of federal money flowed into Utah today to help conserve water. The Bureau of Reclamation is encouraging local solutions to a regional problem.

Snow dusts the peaks, but most of Utah suffered another desperately dry year. That's one reason the United States Bureau of Reclamation awarded $2.7 million in grant money for innovative water projects focused on water conservation and better efficiency.

"The program is aimed at helping to avert conflict in the West. We try to find projects that will help do that," explained Robert Johnson, commissioner of the U.S. Bureau of Reclamation.

The Water 2025 grant program gave out 13 grants to 11 water management districts from Utah, and one each from Idaho and Wyoming. Combined, the programs will help save, or better manage, 85,000 acre feet of water. "The 2025 programs bring an incentive for local communities to work together to figure out how to solve their water problems in a cooperative framework," Johnson said.

The projects range from measuring devices and water banks to canal improvements.

Weber Basin created an innovative water bank that stores spring run-off in underground aquifers. "It's the federal government recognizing that the Wasatch Front has a potential crisis coming for water supply," said Tage Flint, conservancy district manager for Weber Basin Water.

The certainty of growth and the probability of more dry years will force water managers to continue to come up with ways to conserve. "We need to be innovative and use some of these new technologies to stretch our current water supplies farther before we develop anything new," Flint said.

In the long run, the water manager says conservation is just as critical as innovation.

To learn more about the Water 2025 grant program, click the related link.

Grant Recipients

- Bell Canyon Irrigation Company
- Provo River Water Users Association
- Scipio Irrigation Company
- Uintah Indian Irrigation Project
- Uintah Water Conservancy District
- Winder Lateral Association
- Payson City
- Strawberry High Line Canal Association

- Strawberry Water Users Association
- Utah Lake Distributing Company
- Weber Basin Water Conservancy District
- Wyoming State Engineer's Office

The Salt Lake Tribune

http://www.sltrib.com

New lake may greet farmers and fishers in southern Utah
By Mark Havnes
The Salt Lake Tribune
Salt Lake Tribune
Article Last Updated:10/11/2007 10:00:44 AM MDT

KANAB - Southern Utah farmers and fishers soon may land a big one: a new lake.

The proposed Jackson Flat Reservoir, inundating 212 acres of pastureland three miles south of Kanab's city center, would store 3,900 acre-feet of water so planters could irrigate their fields and anglers could hook bass and bluegills.

"It would be a good place for a fishery," said Bruce Bonebrake, regional habitat manager for the Division of Wildlife Resources in Cedar City. "My assumption is it could be like Sand Hollow," a much-larger reservoir in neighboring Washington County.

Jackson Flat also would provide a place for nonmotorized boating and offer shoreline trails for hiking and all-terrain-vehicle riding.

The Kane County Water Conservancy District wants to erect a 42-foot high earthen dam at a cost of $6 million to $7 million to impound water piped from Kanab Creek. The resulting lake would replace three smaller, dried-up reservoirs built in the 1930s but are out of use because their dams are unsafe.

Kanab Irrigation Co. shareholders could tap Jackson Flat's water to nurture their crops.

Mike Noel, executive director of the conservancy district, said the reservoir would allow water to be stored during the winter for use in the summer. Right now, that creek water flows year-round.

"Using water on the fields in winter is not as efficient," Noel said. "[With the reservoir] we can pipe it to the fields in the summer when needed most."

Additional homeowners in Kanab also could tap shares for irrigation, freeing up culinary water now supplied by the city. Even the city itself could buy water to care for its property.

The reservoir would not store water from the controversial pipeline proposed from Lake Powell to the mushrooming St. George area and southwestern Utah.

If all goes as planned, Noel said, construction could start in December or January and would be funded through grants, conservancy-district tax assessments and irrigation-company storage fees.

Noel said the conservancy district spent $900,000 to buy 400 acres for the reservoir from the Jackson family - hence the reservoir's name.

The 30-day comment period for the project's draft environmental assessment has been extended to Nov. 5 to allow further input from the Paiute Tribe, the Kaibab National Forest and the Arizona Game and Fish Department.

Jackson Flat would engulf 15 archaeological sites ranging from Paleo-Indian culture to pioneer settlements. A dozen of those sites, according to the draft environmental assessment, potentially could qualify for the National Register of Historic Places.

The Kaibab Band of Paiute, in a December 2006 letter, warned that the tribe would not endorse the project because it prefers to "preserve what is left of our cultural heritage by protecting archaeological sites."

Even so, the tribe cannot block the reservoir, although it has asked to be kept up to date on the project.

Noel, who does not expect any serious roadblocks to stop the reservoir, said crews will survey, document and collect artifacts from the area - in accordance with federal law. Public education and interpretive outreach programs also have been proposed.

Noel noted that a Kanab-commissioned recreation study by Utah State University several years ago highlighted the reservoir.

"They recommended trails, picnic tables and other amenities that would benefit from having a water resource in the community."

mhavnes@sltrib.com

About Jackson Flat Reservoir

* **Location:** Three miles south of Kanab's center.
* **Type:** Earthen dam.
* **Size:** 212 surface acres.
* **Water capacity:** 3,900 acre-feet.
* **Water source:** Kanab Creek.
* **Operator:** Kane County Water Conservancy District.
* **Cost:** $6 million to $7 million.
* **Construction:** Could start in December or January.
* **Purpose:** Recreation, fishery, irrigation-water storage.

Close Window | Send To Printer

AGENDA ITEM 11

LETTERS

OCTOBER 29, 2007
LETTER

State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

October 29, 2007

Jim Hone
New Haven-Spanish Fork Canyon
2096 East 7200 South
Spanish Fork, Utah 84660

Dear Mr. Hone:

Subject: Notice of Violation and Administrative Order, New Haven-Spanish Fork Canyon Drinking Water System #UTAH25159

New Haven-Spanish Fork Canyon Drinking Water System is a public water system and as such is subject to the Administrative Rules for Public Drinking Water Systems (copy available upon request). Under Utah Administrative Code R 309-100-4, a water system is considered a public water system, when 25 or more people are served water for at least 60 days, or 15 or more water system connections are served, even though the water system is privately held. New Haven-Spanish Fork Canyon has approximately 46 users, and is therefore, a public water system.

In the last year of operation, 528 violation points have been assessed against the New Haven-Spanish Fork Canyon Drinking Water System. Under our Improvement Priority System (IPS) non-transient water systems exceeding 120 points are rated "Not Approved" and placed on a priority list for enforcement actions. The New Haven-Spanish Fork Drinking Water System is currently rated "Not Approved" by our office. Further, because of these violations, the Drinking Water Board is issuing the attached Notice of Violations and Order (Notice and Order) to ensure compliance.

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Please give this Notice and Order your immediate attention. **A written response is required within 30 days after receipt of this NOTICE. This order is fully enforceable unless appealed in writing within 30 days, as described in the "Notice" section of the Notice of Violation and Order. Any response or written answer to this Notice and Order should be addressed to Kenneth H. Bousfield, P.E., Executive Secretary, Drinking Water Board, C/O Division of Drinking Water, 150 North 1950 West, P.O. Box 144830, Salt Lake City, Utah 84114-4830.**

If you have any questions, or wish to review the water system on-site, please call Rachael Cassady, at (801) 536-4467. A phone call to the Division of Drinking Water or an on-site visit does not alter the requirement to timely respond in writing if you wish to contest this Notice and Order.

Sincerely,

DRINKING WATER BOARD

Kenneth H. Bousfield, P.E.
Executive Secretary

RC

Attachments

cc: Utah County Public Health Department
Kathelene Brainch, EPA, Region VIII
M. M. Hubbell, Attorney General Office
Utah County Commission, 100 E Center St Suite 2300, Provo, UT 84606
Utah County Planning Commission, 51 S University Ave, Suite 117, Provo, UT 84601

U:\dr_water\COMPLI\jyee\wp\Compli\Rachael\AO New Haven Letter.doc

DRINKING WATER BOARD

In the Matter of the New Haven-Spanish Fork Drinking Water System #UTAH25159	Notice of Violation and Order Case No. 0701988

The Drinking Water Board ("Board") issues this Notice of Violation and Order under the Utah Safe Drinking Water Act ("Act"), Utah Code Ann. §§ 19-4-104, -105, -106, -107, and -109, Utah Administrative Code ("UAC") Rules 309-100 to-705 and in accordance with the Utah Administrative Procedures Act §§ 63-46b, -0.5 to -23.

FACTS AND VIOLATIONS

1. The New Haven-Spanish Fork Drinking Water System is a public water system in Utah County that provides drinking water to an estimated 46 people. The Administrative Contact listed on the Division of Drinking Water records for the New Haven-Spanish Fork Drinking Water System is Jim Hone.

2. A copy of New Haven-Spanish Fork Drinking Water System's Improvement Priority System (IPS) report (included with Public Water system Master Report – Attachment C) states that 528 IPS points that have been assessed against the water system as of October 16, 2007.

3. Based on the Division of Drinking Water's records, the New Haven-Spanish Fork Water System has failed to sample for pesticides from the WS003 Far West Well in violation of UAC R309-205-6(1)(d).

4. The New Haven-Spanish Fork Water System does not have an operator certified to operate the system at the required level in violation of UAC R309-105-11.

5. The water system facility WS001 East Well is lacking proper plan approval; specifically it has no engineering plans, no preliminary evaluation report and no source protection plan, a violation of UAC R309-500-4(1).

6. A sanitary survey was performed on March 14, 2007. Based on the survey the following deficiencies were found:

   a. The New Haven-Spanish Fork fire hydrant use policy is inadequate, a violation of UAC R309-550-6(5).

   b. There are inadequate sample sites for the residual testing in violation of UAC R309-215-5(2).

c. There is inadequate distribution capacity for fire flow, a violation of UAC R309-550-5(5).

d. Water system facility WS003, Farr West Well lacks plan approval in violation of UAC R309-500-4(1).

e. The cross connection control program lacks written records, local authority, and an on-going enforcement plan in violation of UAC R309-105-12(2).

f. The distribution system has an unprotected cross connection, a violation of UAC R309-105-12(1).

g. The water system facility TP001 East Well has no access to lab or test kits for process testing in violation of UAC R309-520-10(1)(j).

h. The water system facility TP001 East Well has expired chemical reagent used for process control testing in violation of UAC R309-520-10(2)(p).

i. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well have insecure well houses in violation of UAC R309-540-5(1).

j. The elevation on the well casing for water system facility WS003 Far West Well is inadequate, a violation of UAC R309-515-6(13)(a).

k. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well lack a proper well seal in violation of UAC R309-515-6(12)(c).

l. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well do not provide a way to measure the drawdown in violation of UAC R309-515-6(12)(f).

m. The well house cross connection in water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well is unprotected, a violation of UAC R309-515-6(12)(e).

n. The well house in water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well don not have a drain to daylight in violation of UAC R309-515-6(13)(b).

o. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well do not have a smooth nosed sampling tap on the discharge piping equipment in violation of UAC R309-515-6(12)(e).

p. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well all need a check valve on the discharge piping equipment in violation of UAC R309-515-6(12)(e).

q. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well all need a pressure gauge on the discharge piping equipment in violation of UAC R309-515-6(12)(e).

r. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well all need a flow measuring device on the discharge piping equipment in violation of UAC R309-515-6(12)(e).

s. The water system facilities WS001 East Well, WS002 West Well, and WS003 Far West Well all need a shut off valve on the discharge piping equipment in violation of UAC R309-515-6(12)(e).

t. The water system facility TP001 East Well has insufficient chlorine contact time in violation of UAC R309-520-10(f).

u. The water system facility TP001 East Well has no means of measuring water treated with chlorine in violation of UAC R309-520-10(1)(I).

v. The water system facility TP001 East Well solution feeder lacks backflow protection in violation of UAC R309-520-10(2)(j).

w. The chemicals for TP001 East Well are stored improperly in violation of UAC R309-520-10(2)(g).

x. The feed equipment for TP002 West Well is not operable in violation of UAC R309-520-10(2)(f).

y. The daily records for water system facility TP002 West Well do not reflect dosages and totals in violation of UAC R309-520-10(1)(j).

z. The chemical feeders for water system facility TP001 East Well are improperly calibrated in violation of UAC R309-215-9.

aa. There are no provisions for measuring the total chemical use for water system facility TP001 East Well in violation of UAC R309-520-10(1)(I).

bb. The chemicals for water system facility TP001 East Well do not comply with ANSI/NSF standards in violation of UAC R309-520-15(4).

cc. There is inadequate process control testing for water system facility TP001 East Well in violation of UAC R309-215-6.

dd. The distribution system lacks more than 40% of the required storage capacity in violation of UAC R309-510-9.

ORDER

As a part of your responsibilities under Utah Administrative Code Rule 309-100-9, the management of the New Haven-Spanish Fork Water System is hereby ordered to provide the Division of Drinking Water with written evidence of completion of the following items according to the deadlines given below:

1. New Haven-Spanish Fork Water System must provide the Board with evidence that a public notice has been given to each of your customers by mail and newspaper for item #3 as listed in **FACTS AND VIOLATIONS** above. This must include proof of publication regarding the violations listed above as required by UAC R309-220-7. This notice shall include an explanation of all violations and the actions taken by the water system management to prevent further violations.

2. Within 60 days of the receipt of this Notice of Violation and Order, the New Haven-Spanish Fork Water System must develop a cross-connection control program that includes the following components: (1) legally adopted and functional authority to enforce a cross connection control program; (2) written records of cross connection control activities; and (3) documentation of on-going cross connection enforcement activities.

3. The New Haven-Spanish Fork Water System must have a certified operator for the system by June 30, 2008. This operator must, at a minimum, be certified as a Distribution Small System classification.

4. Within 60 days of the receipt of the Notice of Violation and Order, the New Haven-Spanish Fork Water System must gain proper plan approval for WS001 East Well.

5. The New Haven-Spanish Fork Water System must correct all physical deficiencies listed in section 6, paragraphs a through dd in **FACTS AND VIOLATIONS** above within 60 days of the receipt of this Notice of Violation and Order.

NOTICE

If the management of New Haven-Spanish Fork Drinking Water System wishes to contest this "Notice of Violation and Order", they must respond in writing and request a hearing before the Board. The response and request for hearing must be received by the Executive Secretary (at the address below) within 30 days of the date shown on the certificate of mailing. See Utah Code Annotated § 63-46b-3 (2)(a)(vi) and Utah Code Annotated § 63-46b-12. **If you do not request a hearing in writing and participate in the hearing, the Order will become final and you will not be allowed to contest this Notice of Violation in court.** See Utah Code Annotated § 63-46b-14 (2). Utah Code Annotated § 19-4-109 states that anyone who violates the Utah Safe Drinking Water Act, permit, rule, or order is subject to a civil penalty of up to $1,000 per day of violation. Willful violators may be fined up to $5,000 per day.

Issued this 30 day of October, 2007.

DRINKING WATER BOARD

By: Kenneth Bousfield

Kenneth H. Bousfield, P.E.
Drinking Water Board
Executive Secretary
C/O Division of Drinking Water
P.O. Box 144830
Salt Lake City, Utah 84414-4830
Phone: (801) 536-4200

CERTIFICATE OF MAILING

I certify that on October 30, 2007, I caused to be mailed a true and correct copy of the foregoing NOTICE OF VIOLATION AND ORDER to:

BY CERTIFIED MAIL TO:

Jim Hone
New Haven-Spanish Fork Canyon
2096 East 7200 South
Spanish Fork, Utah 84660

BY REGULAR MAIL TO:

M. M. Hubbell
Assistant Attorney General
160 East 300 South, Third Floor
P.O. Box 140873
Salt Lake City, UT 84114-0873

Utah County Health Department
Environmental Health Director
151 South University Ave
Provo, UT 84601-4427

Kathelene Brainch
EPA, Region 8, P-W-TF
1595 Wynkoop Street
Denver, CO 80202-1129

Utah County Commission
100 East Center Street Suite 2300
Provo, UT 84606

Utah County Planning Commission
51 South University Ave Suite 117
Provo, UT 84601

Kenneth H. Bousfield, P.E.
Executive Secretary

Attachment A

Sanitary Survey results of survey conducted March 14, 2007 by Steve Onysko, P.E. of the Division of Drinking Water.

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF DRINKING WATER
Kevin W. Brown, P.E.
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

April 13, 2007

Jim Hone
New Haven Girls Home
2096 East 7200 South
Spanish Fork, UT 84660

Dear Mr. Henrie:

Subject: New Haven Girls Home Water System, System #25159,
Calendar Year 2007 Sanitary Survey

On March 14, 2007, I completed a sanitary survey of your water system. Your water system consists of three wells, each serving a separate residence home, with conventional hydropneumatic pressure tanks at two of the residences (West House and East House) and a more sophisticated setup of a variable frequency drive on the well pump at the third residence (Far East House). There is a chlorination system in West House for water from the West Well. There are cartridge filtration systems, presumably for particulate iron removal, in both the West House and East House for water from West Well and East Well, respectively.

In 2004, the water system was granted an *exception to Rule* to use the West Well and East Well without the normally required Source Protection Plan. The exception was granted until such time that Spanish Fork City water system service area extends to the New Haven Girls Home property area but no later than September 30, 2007. Since that time, your water system has added a third well, the Far East Well, without the required approval from the Division of Drinking Water.

Facilities for water distribution -- from the water sources all the way through to the end-users -- are integral to all public water systems. The *State of Utah Administrative Rules for Public Drinking Water Systems* ***Rule 309-150, Improvement Priority System Rule,*** establishes a point system for quantifying the sanitary survey findings of the distribution components of all Utah public water systems.

Rule 309-150 requires that a noncommunity water system that is assessed more than 100 deficiency points on a sanitary survey must be classified as *not approved*. As a result of the ~~2006~~ 2007 sanitary survey, your water system is now rated as *not approved* because the water system was assessed 300 IPS deficiency points.

Your most significant IPS deficiency points (150 points) were assigned because you are using an unapproved water source, the Far East Well, in your water system. Use of an unapproved water source is assumed to be a serious public health threat and this violation alone requires the Division to rate your water system as *not approved*. There are additional Rule violations at the West Well and the East Well. Neither well appears to have a satisfactory sanitary seal (50 points), wellhead appurtenances (10 points) such as flowmeters or check valves, or well casing vent (5 points). Also, major elements of a mandatory Cross Connection Control Program are missing (30 points) for your public water system. Lastly, the water system is deficient in water storage capacity (50 points) because there is no actual storage other than the hydropneumatic tanks in West House and East House. Under State Rule, hydropneumatic tank storage does not qualify as legitimate water system storage capacity. Your water system also lacks a required bacteriological sampling site plan (5 points).

Both the West Well and the East Well are noted in Division files as treatment facilities. The West Well has chlorination followed by particulate removal in filter cartridges. The East Well has only particulate removal in filter cartridges. The West Well chlorination process appears to lack the required plan approval from the Division. During the survey, you theorized that at sometime in the past the Division directed you to add disinfection at the West Well. A search of our records has not uncovered any such directive. If you have a copy of any communication from the Division to your water system about mandated disinfection, we would like to obtain a copy of that communication. The chlorination system appears to be inadequate mostly because of an old and unreliable solution feed pump. You should upgrade this solution feed pump after consultation with, and approval by, the Division.

The Division recently contacted Spanish Fork City water system manager Richard Heap about possible extension of Spanish Fork City water service to your facility. The cost is estimated at

approximately $60,000. We encourage you to pursue this remedy of your water system deficiencies. Perhaps you can partner on costs with other potential water users along the needed 1500' waterline extension from the edge of the present Spanish Fork water system service area to your property.

Please also note that our search of water rights records for your three wells showed that ownership of the water rights is given as LAMC Company. If this is supposed to be Solacium (Real Estate) Holdings, please update the information with the State Engineer's Office and notify us when the changes have been finalized.

As you correct your water system deficiencies, notify the Division so that the corresponding IPS points can be removed from you water system score. If you have any questions about your sanitary survey results, contact me at 801-536-0096.

Sincerely,

Steven J. Onysko

Steven J. Onysko, P.E.
Environmental Engineer III

sjo

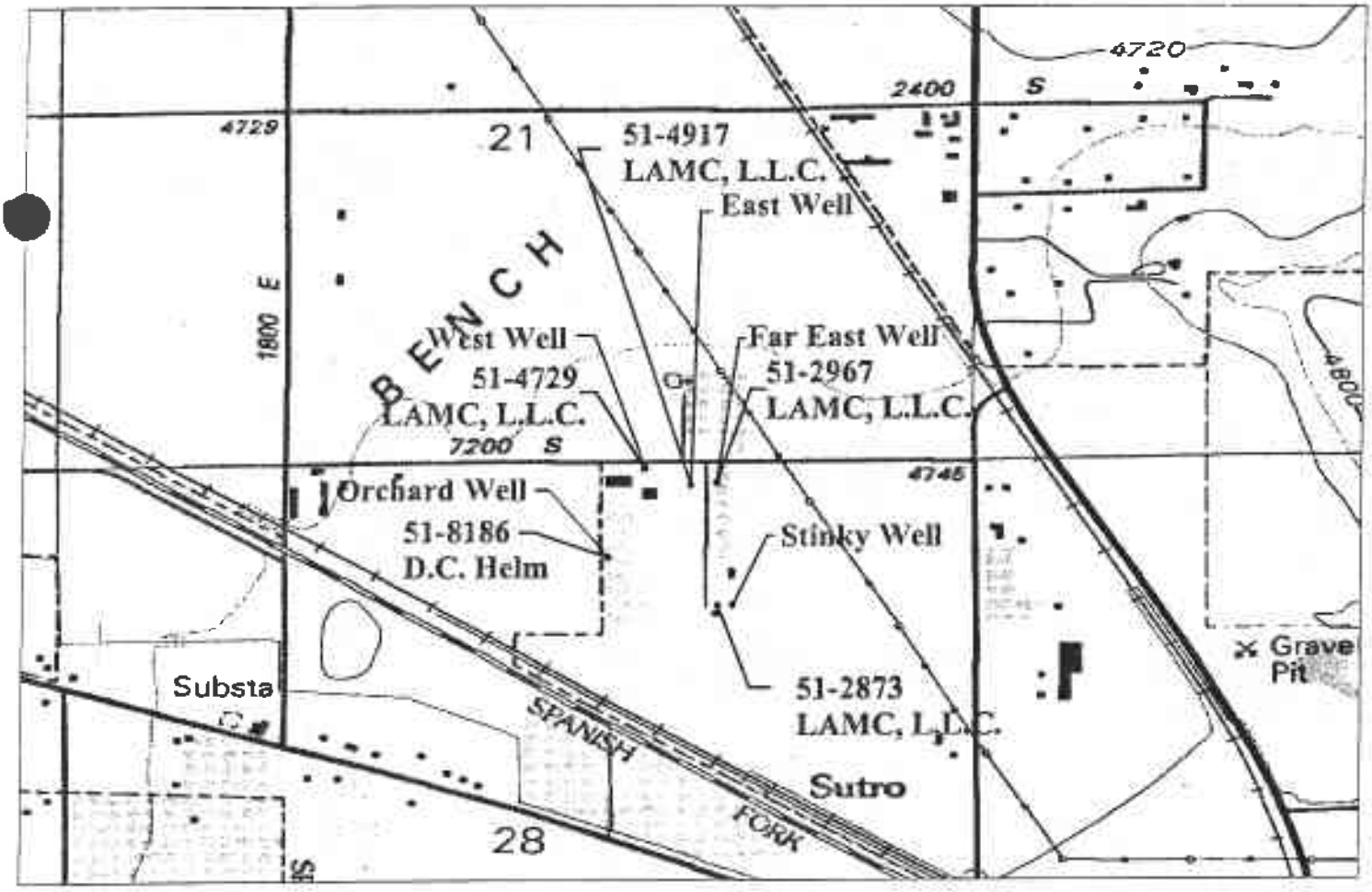
cc: ✓ System File
Reading File (Cover Letter only)
Lanty Ross, Utah County Health Dept., 151 South University Ave., Provo, UT 84601-4427

U:\DR_WATER\ENGINEER\Sonysko\SysSurveys\CY2007\ NewHavenGirlsSpanishFork_25159_CY2007\NewHavenGirlsSpanishFork_25159_CY2007.doc

NEW HAVEN GIRLS HOME/SPANISH FORK WATER SYSTEM #25159

WATER RIGHT	METHOD	GEOPOSITION
51-4917 East Well	PLS Water Right PLS to NAD 83 Water Right PLS to NAD 27	South 210' West 1647' from NE Corner Section 28 T08S R03E Spanish Fork Peak 40.10029° (40° 06' 1.03322") 111.60352° (111° 36' 12.67365") 40.10033° (40° 06' 1.193") 111.60277° (111° 36' 9.965")
51-4729 West Well	PLS Water Right PLS to NAD 83 Water Right PLS to NAD 27	South 76' East 737' from N4 Corner Section 28 T08S R03E Spanish Fork Peak 40.10064° (40° 06' 2.31118") 111.60449° (111° 36' 16.14792") 40.10069° (40° 06' 2.471") 111.60373° (111° 36' 13.439")
51-2967, a6634 Far East Well	PLS Water Right PLS to NAD 83 Water Right PLS to NAD 27	South 191' West 1499' from NE Corner Section 28 T08S R03E Spanish Fork Peak 40.10034° (40° 06' 1.23024") 111.60299° (111° 36' 10.7695") 40.10039° (40° 06' 1.390") 111.60224° (111° 36' 8.061")

SOURCE	METHOD	GEOPOSITION
DDW-01 East Well	Field NAD83 Field NAD83 to NAD27 Field NAD83 to PLS	No 2007 GPS Reading (not enough satellites)
DDW-02 West Well Oldest	Field NAD83 Field NAD83 to NAD27 Field NAD83 to PLS	40.10066° (40° 06' 2.38581") 111.60447° (111° 36' 16.08869") 40.10071° (40° 06' 2.54562") 111.60372° (111° 36' 13.37978") South 68.46' East 741.65' from N4 Corner Section 28 T08S R03E Spanish Fork Peak
DDW-03 Far East Well Newest	Field NAD83 Field NAD83 to NAD27 Field NAD83 to PLS	40.10034° (40° 06' 1.22657") 111.60299° (111° 36' 10.76085") 40.10039° (40° 06' 1.38633") 111.60224° (111° 36' 8.05234") South 188.53' East 1154.70' from N4 Corner Section 28 T08S R03E Spanish Fork Peak



Sanitary Survey - Deficiency Report

PWS Number: UTAH25159 **Total Demerit Points:** 823 **Survey Date:** 4/12/2007

Survey Name: NEW HAVEN-SPANISH FK CAN **Surveyor Name:** Steven Onysko

Sanitary Survey Category: DS

SDWIS Severity Code: Significant Deficiency

Management / Cross-Connections

Are there any unprotected connections between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system?

Answer Recorded Yes

Comments: R309-105-12(1)

R309-105-12(1) states that a water supplier shall not allow a connection to his system which may jeopardize its quality and integrity. Cross connections are not allowed unless controlled by an approved and properly operating backflow prevention assembly. 50 demerit points. This deficiency shall be corrected immediately.

Notes:

All three drinking water wells have substandard connections to outdoor irrigation systems.

Demerit Points: 50

Days to Correct Deficiency: 0

SDWIS Deficiency Description: M020 UNPROTECTED CROSS CONN PRESENT IN DIST SYSTEM

Sanitary Survey Category: DS

SDWIS Severity Code: Recommendation

DISTRIBUTION SYSTEM - (Active) / Cross-Connections

Does the water system have a program to control the use of fire hydrants?

Answer Recorded No

Comments: **Fire hydrants provide a direct access to the water in the distribution system. In order to protect the quality and integrity of the water, fire hydrant access should be controlled.**

Notes:

Demerit Points: 0

Days to Correct Deficiency: 0

SDWIS Deficiency Description: D012 REC - FIRE HYDRANT USE POLICY INADEQUATE

SDWIS Severity Code: Minor Deficiency

DISTRIBUTION SYSTEM - (Active) / Design

Do all water mains (installed after 1995) that provide fire flow have a diameter of at least 8 inches?

Answer Recorded No

Comments: **R309-550-5(4) states that the minimum line size serving a fire hydrant lateral shall be 8-inch diameter unless a hydraulic analysis indicates that required flow and pressuress can be maintained by smaller lines. 5 demerit points. This deficiency should be corrected within 365 days.**

Notes:

Demerit Points: 5

Days to Correct Deficiency: 365

SDWIS Deficiency Description: D019 INADEQUATE DISTRIBUTION CAPACITY FOR FIREFLOW

Sanitary Survey Category: FW

SDWIS Severity Code: Significant Deficiency

Management / Planning / General

Does the system meet a minimum of 80% of the required storage capacity?

Answer Recorded No

Comments: R309-510-8 **R309-510-8 designates the appropriate amount of storage per water system. 20 demerit points shall be assigned. This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 365

SDWIS Deficiency Description: V031 SYSTEM LACKS 20% OF REQUIRED STORAGE CAPACITY

Does the system meet a minimum of 70% of the required storage capacity?

Answer Recorded No

Comments: R309-510-8 **R309-510-8 designates the appropriate amount of storage per water system. 30 demerit points shall be assigned. This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 30

Days to Correct Deficiency: 365

SDWIS Deficiency Description: V032 SYSTEM LACKS 30% OF REQUIRED STORAGE CAPACITY

Sanitary Survey Category: FW

SDWIS Severity Code: Significant Deficiency

Management / Planning / General

Does the system meet a minimum of 60% of the required storage capacity?

Answer Recorded No

Comments: R309-510-8 **R309-510-8 designates the appropriate amount of storage per water system. 40 demerit points shall be assigned. This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 40

Days to Correct Deficiency: 365

SDWIS Deficiency Description: V033 SYSTEM LACKS 40% OF REQUIRED STORAGE CAPACITY

SDWIS Severity Code: Minor Deficiency

Management / Planning / General

Does the system meet a minimum of 90% of the required storage capacity?

Answer Recorded No

Comments: R309-510-8 **R309-510-8 designates the appropriate amount of storage per water system. 10 demerit points shall be assigned . This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 10

Days to Correct Deficiency: 365

SDWIS Deficiency Description: V030 SYSTEM LACKS 10% OF REQUIRED STORAGE CAPACITY

Sanitary Survey Category: MR

SDWIS Severity Code: Minor Deficiency

DISTRIBUTION SYSTEM - (Active) / Disinfection

Does your water facility disinfection procedures meet the AWWA C-601, 602, 651, 652 Standards for disinfection?

Answer Recorded No

Comments: R309-105-10(2)&(3) **R309-105-10(2)&(3) stte that all new and repaired water mains and appurtenances and reservoirs shall be disinfected in accordance with AWWA Standard C651. 10 demerit points. This deficienct practice shall stop immediately.**

Notes:

Demerit Points: 10

Days to Correct Deficiency: 0

SDWIS Deficiency Description: D018 IMPROPER BATCH DISINFECTION PRACTICES

Sanitary Survey Category: OC

SDWIS Severity Code: Significant Deficiency

Management / Staffing

Is the main operator properly certified at the level required for the system?

Answer Recorded No

Comments: R309-300-3 **R309-300-3 requires all community and NTNC water system and any public water system that utilizes a surface water source shall be operated by a appropriately certified operator. 30 demerit points. This deficiency should be corrected within 365 days of notification.**

Notes: Nontransient noncommunity water system operators must be certified. The present water system operator, Jim Hone, is not certified.

Demerit Points: 30

Days to Correct Deficiency: 365

SDWIS Deficiency Description: C001 OPERATOR NOT CERT TO LEVEL REQUIRED FOR SYSTEM

Sanitary Survey Category: SM

SDWIS Severity Code: Significant Deficiency

Management / Planning / General

DDW review of recent modifications:

Answer Recorded No

Comments: R309-105-6(1) **R309-105-6(1) requires complete plans & specification for all public drinking water projects shall be approved in writing by the Executive Secretary. 50 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes: A third well, the Far East Well, which dates back many years as an irrigation well for the former farm and orchard, was rehabilitated and put into drinking water system use without Division

Demerit Points: 50

Days to Correct Deficiency: 90

SDWIS Deficiency Description: G001 WATER SYSTEM FACILITY LACKS PLAN APPROVAL

Management / Source Protection

Is there a current copy of each of the DWSP Plans on the premises of the water system? (If this is a transient non-community, they should have a copy of their assessment on the premises.)

Answer Recorded No

Comments: R309-600-7 & 605-7 **R309-600-7 & 605-7 require a public water system to develop, submit and implement a source protection plan for each of its sources and update and resubmit their DWSP plans every 6 years. 30 demerit points. This deficiency should be corrected within 30 days.**

Notes: In fact, the unapproved third well, the Far East Well, has no Division-recorded DWSP Plan. The two older wells, west Well and East Well, have DWSP Plans on file at DDW but not at the facility itself.

Demerit Points: 30

Days to Correct Deficiency: 30

SDWIS Deficiency Description: SP02 NO CURRENT COPY OF SOURCE PROTECTION PLAN ON SITE

Sanitary Survey Category: SM

SDWIS Severity Code: Significant Deficiency

Management / Source Protection

Are there any new sources for which a Preliminary Evaluation Report has not been submitted?

Answer Recorded Yes

Comments: R309-600-13 & 605-9 **R309-600-13 & 605-9 require a public water system to submit a preliminary evaluation report prior to development of any new source of drinking water. Demerit points assessed under unapproved source category. This deficiency should be corrected within 30 days.**

Notes: Far East Well.

Demerit Points: 0

Days to Correct Deficiency: 30

SDWIS Deficiency Description: SP06 UNAPPROVED SOURCE NO PRELIM EVALUATION REPORT

Are there any old sources that have come into use for which a DWSP Plan has not been submitted?

Answer Recorded Yes

Comments: R309-600-7 & 605-7 **R309-600-7 & 605-7 require a public water system to develop, submit and implement a source protection plan for each of its sources. 30 demerit points. This deficiency should be corrected immediately.**

Notes: The third well, the Far East Wall. A 10/24/04 construction and DWSP Plan exception was granted.

Demerit Points: 30

Days to Correct Deficiency: 0

SDWIS Deficiency Description: SP08 OLD SOURCE LACKS A DWSP PLAN

Sanitary Survey Category: SM

SDWIS Severity Code: Recommendation

Management / Emergency Response

Does your system have a written Emergency Response Plan?

Answer Recorded No

Comments: R309-150-10(2) **A written Emergency Response Plan helps to protect the quality and quantity of water available to consumers. R309-150-10(2) allows 10 credit points to be issued.**

Notes:

Demerit Points: -10

Days to Correct Deficiency: 0

SDWIS Deficiency Description: M001 CURRENT EMERGENCY RESPONSE PROGRAM

SDWIS Severity Code: Recommendation

Management / Planning / General

Are there any undocumented water system facilities? (i.e. tanks, pump stations, treatment facilities, etc.)

Answer Recorded Yes

Comments: **This facility does not appear to have an operating permit issued by the Division of Drinking Water.**

Notes: The one chlorination process in the water system, hypochlorite solution feed at the West Well, never received plan approval.

Demerit Points: 0

Days to Correct Deficiency: 0

SDWIS Deficiency Description: TGR3

Sanitary Survey Category: SM

SDWIS Severity Code: Minor Deficiency

Management / Cross-Connections

Legally adopted authority statement?

Answer Recorded No

Comments: R309-105-12(2)(a) **R309-105-12(2)(a) requires each public water system to have a cross connection control program which includes a legally adopted and functional local authority statement. 10 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 10

Days to Correct Deficiency: 90

SDWIS Deficiency Description: M003 CCC-LACKS LOCAL AUTHORITY

Records of hazards found, protection required and installed, enforcement actions, assembly testing etc.?

Answer Recorded No

Comments: R309-105-12(2)(d) **R309-105-12(2)(d) requires each public water system to have a cross connection control program which includes written records of cross connection control activities. 10 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 10

Days to Correct Deficiency: 90

SDWIS Deficiency Description: M006 CCC-LACKS WRITTEN RECORDS

Sanitary Survey Category: SM

SDWIS Severity Code: Minor Deficiency

Management / Cross-Connections

Documentation of on-going program enforcement? (ie records of periodic hazard assessments, annual test report, updated assembly inventory, etc)

Answer Recorded No

Comments: R309-105-12(2)(e) **R309-105-12(2)(e) requires each public water system to have a cross connection control program which includes test history and documentation of on-going enforcement. 10 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 10

Days to Correct Deficiency: 90

SDWIS Deficiency Description: M007 CCC-LACKS ON-GOING ENFORCEMENT PLAN

Management / Source Protection

Has there been reconstruction or redevelopment of any ground-water source for which a revised DWSP Plan has not been submitted?

Answer Recorded Yes

Comments: **R309-600-7(2)(f) & 605-7(1)(c)(vi) require a public water system to submit and implement a revised source protection plan within 180 days after reconstruction or redevelopment of a drinking water source. 20 demerit points. This deficiency should be corrected within 30 days.**

Notes: The third well, the Far East Well. A 10/24/04 construction and DWSP Plan exception was granted.

Demerit Points: 20

Days to Correct Deficiency: 30

SDWIS Deficiency Description: SP09 NO DWSP REVISION SUBMITTED AFTER REDEV OF SOURCE

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / General / General

Are there any undocumented source(s) physically connected to the drinking water system?

Answer Recorded Yes

Comments: R309-105-6 **R309-105-6 requires all construction of public drinking water facilities be approved in writing by the Division of Drinking Water. 150 demerit points. This deficiency should be corrected immediately.**

Notes: The third well, the Far East Well.

Demerit Points: 150

Days to Correct Deficiency: 0

SDWIS Deficiency Description: S001 SOURCE LACKS PLAN APPROVAL

Sources / Groundwater / EAST WELL - (Active) / Construction

Is the sanitary seal properly installed and maintained?

Answer Recorded No

Comments: R309-515-6(6)(12)(a)(ii), **R309-515-6(6)(12)(a)(ii), (b)(i), (c)(i), (d)(v), & (e)(iii) require a sanitary seal be installed and maintained at the wellhead and discharge piping. 50 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes: No evidence of a sanitary seal.

Demerit Points: 50

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S013 - WELL LACKS PROPER SANITARY SEAL

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / Groundwater / EAST WELL - (Active) / Construction

Is the wellhead properly secured against unauthorized personnel?

Answer Recorded No

Comments: R309-105-10(5) **R309-105-10(5) requires all water system facilities to be secure. 20 demerit points. This deficiency should be corrected immediately.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 0

SDWIS Deficiency Description: S002 WELL HOUSE NOT SECURE

Sources / Groundwater / EAST WELL - (Active) / Pumps

Are cross-connections present in the well discharge piping?

Answer Recorded Yes

Comments: **R309-515-6(12)(e)(ii) states the well discharge piping shall be protected against the entrance of contamination. 5 demerit points. This deficiency should be corrected within 30 days.**

Notes: Substandard connection to nearby outdoor irrigation.

Demerit Points: 5

Days to Correct Deficiency: 30

SDWIS Deficiency Description: S021 UNPROTECTED CROSS CONN PRESENT IN WELL HOUSE

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / Groundwater / WEST WELL - (Active) / Construction

Is the well site in a flood plain or area likely to be flooded?

Answer Recorded Yes

Comments: R309-515-6(6)(b)(vi) **R309-515-6(6)(h)(vi) & (13)(a) & (d) require the top of the well casing to extend around the surrounding surface area to prevent source contamination. 20 demerit points. This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 365

SDWIS Deficiency Description: S003 ELEVATION OF WELL CASING INADEQUATE

Is the sanitary seal properly installed and maintained?

Answer Recorded No

Comments: R309-515-6(6)(12)(a)(ii), **R309-515-6(6)(12)(a)(ii), (b)(i), (c)(i), (d)(v), & (e)(iii) require a sanitary seal be installed and maintained at the wellhead and discharge piping. 50 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 50

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S013 WELL LACKS PROPER SANITARY SEAL

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / Groundwater / WEST WELL - (Active) / Construction

Is the wellhead properly secured against unauthorized personnel?

Answer Recorded No

Comments: R309-105-10(5) **R309-105-10(5) requires all water system facilities to be secure. 20 demerit points. This deficiency should be corrected immediately.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 0

SDWIS Deficiency Description: S002 WELL HOUSE NOT SECURE

Sources / Groundwater / WEST WELL - (Active) / Pumps

Are cross-connections present in the well discharge piping?

Answer Recorded Yes

Comments: **R309-515-6(12)(e)(iii) states the well discharge piping shall be protected against the entrance of contamination. 5 demerit points. This deficiency should be corrected within 30 days.**

Notes: All three wells have substandard connections to irrigation systems.

Demerit Points: 5

Days to Correct Deficiency: 30

SDWIS Deficiency Description: S021 UNPROTECTED CROSS CONN PRESENT IN WELL HOUSE

SDWIS Severity Code: Significant Deficiency

Sources / Groundwater / FAR EAST WELL - (Active) / Construction

Is the well site in a flood plain or area likely to be flooded?

Answer Recorded Yes

Comments: R309-515-6(6)(b)(vi) **R309-515-6(6)(b)(vi) & (13)(a) & (d) require the top of the well casing to extend around the surrounding surface area to prevent source contamination. 20 demerit points. This deficiency should be corrected within 365 days of notification.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 365

SDWIS Deficiency Description: S003 ELEVATION OF WELL CASING INADEQUATE

Is the sanitary seal properly installed and maintained?

Answer Recorded No

Comments: R309-515-6(6)(12)(a)(ii), **R309-515-6(6)(12)(a)(ii), (b)(i), (c)(i), (d)(v), & (e)(iii) require a sanitary seal be installed and maintained at the wellhead and discharge piping. 50 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 50

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S013 WELL LACKS PROPER SANITARY SEAL

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / Groundwater / FAR EAST WELL - (Active) / Construction

Is the wellhead properly secured against unauthorized personnel?

Answer Recorded No

Comments: R309-105-10(5) **R309-105-10(5) requires all water system facilities to be secure. 20 demerit points. This deficiency should be corrected immediately.**

Notes:

Demerit Points: 20

Days to Correct Deficiency: 0

SDWIS Deficiency Description: S002 WELL HOUSE NOT SECURE

Sources / Groundwater / FAR EAST WELL - (Active) / Pumps

Are cross-connections present in the well discharge piping?

Answer Recorded Yes

Comments: **R309-515-6(12)(e)(iii) states the well discharge piping shall be protected against the entrance of contamination. 5 demerit points. This deficiency should be corrected within 30 days.**

Notes: All three wells have substandard connections to irrigation systems.

Demerit Points: 5

Days to Correct Deficiency: 30

SDWIS Deficiency Description: S021 UNPROTECTED CROSS CONN PRESENT IN WELL HOUSE

Sanitary Survey Category: SO

SDWIS Severity Code: Recommendation

Sources / Groundwater / EAST WELL - (Active) / Pumps

Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?

Answer Recorded No

Comments: R309-515-6(12)(e)(v) **R309-515-6(12)(e)(v) requires a well that pumps directly into the distribution system be equipped with an air release vacuum relief valve located upstream of the check valve. 6 demerit points. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 6

Days to Correct Deficiency: 90

SDWIS Deficiency Description: SL01 NO MEANS TO RELEASE TRAPPED AIR FROM SOURCE PUMP

Sources / Groundwater / WEST WELL - (Active) / Pumps

Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?

Answer Recorded No

Comments: R309-515-6(12)(e)(v) **R309-515-6(12)(e)(v) requires a well that pumps directly into the distribution system be equipped with an air release vacuum relief valve located upstream of the check valve. 6 demerit points. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 6

Days to Correct Deficiency: 90

SDWIS Deficiency Description: SL01 NO MEANS TO RELEASE TRAPPED AIR FROM SOURCE PUMP

Sanitary Survey Category: SO

SDWIS Severity Code: Recommendation

Sources / Groundwater / FAR EAST WELL - (Active) / Pumps

Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?

Answer Recorded No

Comments: R309-515-6(12)(e)(v) **R309-515-6(12)(e)(v) requires a well that pumps directly into the distribution system be equipped with an air release vacuum relief valve located upstream of the check valve. 6 demerit points. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 6

Days to Correct Deficiency: 90

SDWIS Deficiency Description: SL01 NO MEANS TO RELEASE TRAPPED AIR FROM SOURCE PUMP

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / EAST WELL - (Active) / Construction

Is there a means to measure drawdown?

Answer Recorded No

Comments: R309-515-6(12)(f)(i) **R309-515-6(12)(f)(i) states provisions shall be made to permit periodic measurement of water leveles in the completed well. 1 demerit points. This deficiency shall be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S015 WELL LACKS A MEANS TO MEASURE DRAWDOWN

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / EAST WELL - (Active) / Pumps

Is adequate drainage provided?

Answer Recorded No

Comments: R309-515-6(13)(b) **R309-515-6(13)(h) states where a well house is constructed the floor surface shall be at least 6 inches above the final ground elevation and shall be sloped to provide drainage. A drain to daylight shall be provided unless highly impractical. 5 demerit points. This deficiency should be corrected within 365 days.**

Notes: Ground around casing is level but ponding could occur.

Demerit Points: 5

Days to Correct Deficiency: 365

SDWIS Deficiency Description: S022 LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN

Pump discharge piping: a smooth-nosed sampling tap?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S023 NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / EAST WELL - (Active) / Pumps

Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S024 NO CHECK VALVE ON DISCHARGE PIPING

Pump discharge piping: pressure gauge?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S025 NO PRESSURE GAUGE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / EAST WELL - (Active) / Pumps

Pump discharge piping: flow meter?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S026 NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

Pump discharge piping: isolation gate valves?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S027 NO SHUT OFF VALVE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / WEST WELL - (Active) / Construction

Is there a means to measure drawdown?

Answer Recorded No

Comments: R309-515-6(12)(f)(i) **R309-515-6(12)(f)(i) states provisions shall be made to permit periodic measurement of water leveles in the completed well. 1 demerit points. This deficiency shall be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S015 WELL LACKS A MEANS TO MEASURE DRAWDOWN

Sources / Groundwater / WEST WELL - (Active) / Pumps

Is adequate drainage provided?

Answer Recorded No

Comments: R309-515-6(13)(b) **R309-515-6(13)(b) states where a well house is constructed the floor surface shall be at least 6 inches above the final ground elevation and shall be sloped to provide drainage. A drain to daylight shall be provided unless highly impractical. 5 demerit points. This deficiency should be corrected within 365 days.**

Notes: Ground is level near wellhead but ponding is possible.

Demerit Points: 5

Days to Correct Deficiency: 365

SDWIS Deficiency Description: S022 LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / WEST WELL - (Active) / Pumps

Pump discharge piping: a smooth-nosed sampling tap?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S023 NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S024 NO CHECK VALVE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / WEST WELL - (Active) / Pumps

Pump discharge piping: pressure gauge?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S025 NO PRESSURE GAUGE ON DISCHARGE PIPING

Pump discharge piping: flow meter?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S026 NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / WEST WELL - (Active) / Pumps

Pump discharge piping: isolation gate valves?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S027 NO SHUT OFF VALVE ON DISCHARGE PIPING

Sources / Groundwater / FAR EAST WELL - (Active) / Construction

Is there a means to measure drawdown?

Answer Recorded No

Comments: R309-515-6(12)(f)(i) **R309-515-6(12)(f)(i) states provisions shall be made to permit periodic measurement of water leveles in the completed well. 1 demerit points. This deficiency shall be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S015 WELL LACKS A MEANS TO MEASURE DRAWDOWN

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / FAR EAST WELL - (Active) / Pumps

Is adequate drainage provided?

Answer Recorded No

Comments: R309-515-6(13)(b) **R309-515-6(13)(b) states where a well house is constructed the floor surface shall be at least 6 inches above the final ground elevation and shall be sloped to provide drainage. A drain to daylight shall be provided unless highly impractical. 5 demerit points. This deficiency should be corrected within 365 days.**

Notes:

Demerit Points: 5

Days to Correct Deficiency: 365

SDWIS Deficiency Description: S022 LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN

Pump discharge piping: a smooth-nosed sampling tap?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S023 NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / FAR EAST WELL - (Active) / Pumps

Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S024 NO CHECK VALVE ON DISCHARGE PIPING

Pump discharge piping: pressure gauge?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S025 NO PRESSURE GAUGE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / FAR EAST WELL - (Active) / Pumps

Pump discharge piping: flow meter?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S026 NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

Pump discharge piping: isolation gate valves?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S027 NO SHUT OFF VALVE ON DISCHARGE PIPING

Sanitary Survey Category: TR

SDWIS Severity Code: Minor Deficiency

EAST WELL - (Active) / Filtration / Cartridge

Is disinfection being used to prevent fouling and reduce microbial pass-through?

Answer Recorded No

Comments:

Notes:

Demerit Points: 0

Days to Correct Deficiency: 0

SDWIS Deficiency Description: T031 NO DISINFECT USD-REDUCE FOULING/MICROBIAL PAS THRU

WEST WELL - (Active) / Chlorination / General

Is there a means to measure the volume of water treated?

Answer Recorded No

Comments: R309-520-10(1)(i) **R309-520-10(1)(i) requires a means to measure water flow to be treated. 2 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes: None of the three wells has a flowmeter.

Demerit Points: 2

Days to Correct Deficiency: 90

SDWIS Deficiency Description: TD79 NO MEANS OF MEASURING WATER TREATED WITH CHLORINE

Sanitary Survey Category: TR

SDWIS Severity Code: Minor Deficiency

WEST WELL - (Active) / Chlorination / General

Are there an adequate number of disinfection residual sample sites and do they provide a representative sample of system conditions?

Answer Recorded No

Comments: R309-210-8(3)(a)(I) **R309-210-8(3)(a)(I) requires sampling of disinfection residual at representative sites in the distribution system. It appears your sample site selection is inadequate, demerit points will be assessed based on your quarterly treatment reports.**

Notes: Operator has no sampling site map.

Demerit Points: 0

Days to Correct Deficiency: 0

SDWIS Deficiency Description: D017 INADEQUATE SAMPLE SITES FOR RESIDUAL TESTING

WEST WELL - (Active) / Chlorination / Hypochlorination

Are hypochlorite feeders of the positive displacement type?

Answer Recorded No

Comments: R309-520-10(1)(b) **R309-520-10(1)(b) states chlorination feeding equipment shall be solution-feed gas type chlorinators, direct-feed gas type chlorinators or hpochlorite liquid feeers of a positive displacement type. 10 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes: The hypochorite feed pump is a diaphragm pump. This is not a deficiency!

Demerit Points: 10

Days to Correct Deficiency: 90

SDWIS Deficiency Description: TD51 CL2 HYPO FEEDERS ARE NOT POS. DISPLACEMNT TYPE

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION - FIELD NOTES

Note: This Sanitary Survey Form is no longer the official sanitary survey report format. In 2006, the Division of Drinking Water migrated sanitary survey reports to elelectronic sanitary survey (ESS) format. These 2006 field notes are for background informational puroses only.

1. Administrative Issues

(Office Interview)

System Name: New Haven Girls Home, Spanish Fork System #: 25159

Name of Surveyor:

Water System Representative(s)/Others accompanying survey:

Jim Hone Phone: 801-380-4375

Casey Kilpatrick Phone: 801-380-4377

Dustin Tibbetts Phone: 801-380-4377

2096 East 7200 South

Spanish Fork, UT 84660

Plan Review

***** Request for Exception to Rules *****

2004: Exception request for well construction and source protection. Approved 10/24/04.

[Note: the letter states that the exception is valid until Spanish Fork City provides water to the area or until September 30, 2007.]

Note: The water system asked for, and received, a three-year exception (expires 9/30/07) to tide it over until Spanish Fork City water system expansion to new service areas would run past the New Haven Girls Home and allow abandonment of the New Haven Girls Home wells in favor of water purchase from Spanish Fork. Discussion with Richard Heap (801-798-5000) at Spanish Fork City on the day after: $60,000

Date of Survey: March 14, 2007

Spanish Fork City's waterlines nearest the New Haven Girls Home is still 1500 feet away. Although development is projected along the route to the Home, the City is not ready to install new waterline until a development can be billed for the extension. The City is willing to extend service to the New Haven Girls Home if somebody pays the City's cost.

2006 Survey

Sys. #25159 is the New Haven Girls Home/Spanish Fork.

Sys. #25160 is no longer listed in DDW files. Sys. #25160 may have referred to now #25159's East Well.

Sys. #25161 is the New Haven Girls Home/Saratoga Springs.

The New Haven Girls Home is owned by Solacium (Real Estate) Holdings, a for-profit company. The facility property used to be a big orchard and farm reputedly reknown for some of Utah's best produce. The property has a history that includes ownership at various times by the Copling family and then Paul Whiting.

The Spanish Fork facility started out a number of years ago as the project of the late Mark McGregor and his wife, who were dedicated to establishment of a facility for troubled girls. The McGregor family purchased and refurbished the old farm house on the then-orchard property, named it the West House, and began facility operation with 8 girls in residence. The McGregor family then built an additional residential structure, the East House, and increased the total facility capacity to 16 girls.

After diagnosis of his fatal brain cancer a few years ago, Mark McGregor fulfilled his wish that the facility carry on by selling the property and assets to Solacium (Real Estate) Holdings Company. Solacium's Val Christenson then built the Far East House, with 16-girl capacity, to bring the total capacity to 32 girls.

Despite the house capacities of record:

West House (Mother Theresa Hose) : 8 girls

East House (Eleanor Roosevelt House): 8 girls

Far East House (Sacajawea House): 16 girls

the operator stated that there are 42 girls and 170 support staff (e.g.,therapists and teachers).

Date of Survey: March 14, 2007

There are five wells on the property, two of which are recognized by the Division as approved public water sources. Three wells, however, are used for drinking water:

West Well (DDW WS001) at NE corner of West House

East Well (DDW WS002) at SW corner of East House

Far East Well (not approved but nevertheless being used) on south side of Far East House

Orchard Well (abandoned)

Stinky House Well (abandoned)

After the 2007 survey, the Division assigned identifier WS003 to the unapproved Far East Well. It appears that none of the sources -- WS001, WS002, or WS003 -- ever received construction approval. It is likely that there were five wells on the original farm property and over the years there has been rehabilitation in succession of three of these wells (without Division approval) -- west Well, then east Well (2001? 2002?), and finally Far East Well (2005? 2006?).

The New Haven Girls Home asked the Division for a Rule exception in 2004 to allow use of the west and east wells until such time as Spanish Fork City's water system expanded to the area. The request mentioned no later than 2007 at worst. But 2007 's here now and the City water system is still 1500 feet away. Although the 2004 exception request was granted, it applied to only the West and East wells. The Far East well had not been rehabilitated (without Division approval) at that time.

Until the facility owners rehabilitated the Far East Well and (inappropriately) put it into drinking water service, it too was simply an abandoned well on the property. All of the wells are apparently fairly shallow but only the West Well has chlorination. The operator believes that the State, in fact, mandated chlorination of this well several years ago.

The West Well may date back 50 years. Both the West Well and the East Well have taste and odor problems at least partially caused by iron and sulfide. Interestingly, the operator has heard that the west Well had no such water quality problems until the East Well was drilled.

Each of the three active wells has a separate distribution system. All three drinking water wells also supply irrigation systems without any of the backflow prevention mitigations required by State Rule. There are two emergency power generators. The West Well has a fixed emergency power generator and a portable, second emergency power generator is available and would probably be used at the Far East Well if the West Well alone could not meet water demand in an emergency.

Date of Survey: March 14, 2007

DDW records show one chlorinator on site at the East Well but it is actually at the west Well. The operator believes that there is a letter somewhere in the facility records wherein the Stated ordered chlorination of the West Well.

There are two large pools on site that could be tapped by fire pumper trucks in an emergency. The West House pool is 250,000 gallons and is operated as a swimming pool for the girls in summers with an erosion feeder for chlorine tablets, pumps, filters, and muratic acid (HCl) to keep pH below 8+ where algae otherwise fluorish. The East House pool is 100,000 gallons and is referred to as "the fish pond."

The operator, Jim Hone, attended an Operator's class in Wellington, UT, in March 2007.

2003 Survey

System #25159 includes a residence/office building and a separate school building.

Sulfur-associated taste and odor is treated via filtration and softening in the residence. Untreated water is served to the school building. Some water service is provided at horse barns where there are satisfactory air gaps for backflow prevention.

The water system has a current Emergency Response Plan and a written Financial Management Plan.

10 points will be credited to a water system with a current Emergency Response Program

0 or 10 Points: 0

10 points will be credited to a water system which has a written Financial Management Plan; including an appropriate rate structure, infra-structure replacement plan, master plan.

0 or 10 Points: 0

Total Points Credited: 0

Date of Survey: *March 14, 2007*

Service Data

Have there been any customer complaints received and validated during the last three (3) years dealing with any of the following list of categories?

☐ Yes ☐ No ☑ Unknown

** *(Indicate the number of complaints received in each category)* **

Turbidity _____ Taste and Odor _____ Pressure _____

Sickness (Water System Suspected) _____ Waterborne Disease Outbreak _____

Service Interruptions or Water Outages _____

Comments: _____

Source Monitoring

5 points will be assessed to water system which does not have an adequate bacteriological sampling site plan. [R309-210-5(1)(d)]

To be fixed by: _____ **0 or 5 Points:** *5*

operator intends to mark up a site plan with sampling locations

5 points will be assessed to any community or nontransient noncommunity water system which does not have an adequate lead/copper sampling site plan. [R309-210-6(3)(a)].

To be fixed by: _____ **0 or 5 Points:** *0*

Comments: _____

Date of Survey: *March 14, 2007*

Cross Connection

50 points total, or 10 points per element, will be assessed to a water system that does not have any of the below-listed components of a cross connection control program. [R309-105-12]

A water system which only has some of the components of a cross connection control program shall be assessed the following number of points.

10 points will be assessed to a water system which does not have local authority to enforce a cross connection program (i.e., ordinances, bylaws or policies).

To be fixed by: _____ **0 or 10 Points:** *0*

10 points will be assessed to a water system which does not provide public education or awareness material presentations on an annual basis.

To be fixed by: _____ **0 or 10 Points:** *10*

10 points will be assessed to a water system which does not have an operator with training in the area of cross connection.

To be fixed by: _____ **0 or 10 Points:** *0*

10 points will be assessed to a water system with no written records of cross connection activities, such as backflow assembly inventories, hazard assessment, and/or test history.

To be fixed by: _____ **0 or 10 Points:** *10*

10 points will be assessed to a water system which does not have an on-going enforcement activity plan.

To be fixed by: _____ **0 or 10 Points:** *10*

Comments: Operator Jim Hone has backflow experience/training from employment in the hospital industry. All three wells are directly connected to irrigation systems and there is little or no information on the below-ground plumbing. Stop-and-waste valves, which are inadequate for backflow prevention, were noted at each wellhead.

Total Administrative Issue Points: *30*

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Well

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Source Number: WS001 **Source Name:** East Well (newer than WS002 West Well)

Location: southwest corner of residence **Period of Use:** Year 'Round

Latitude: see below **Longitude:** see below

NAD 83	NAD 27	PLS
40° 6' 1.03322" (40.10028701°)	<--- 40° 6' 1.193" (40.10033°)	<--- S 210' W 1647' NE S28 T08S R03E
111° 36' 12.67365" (111.6035205°)	111° 36' 9.965" (111.60277°)	

No 2007 GPS Readings

2006 Survey

The East Well probably dates back to when the property was a farm and orchard. It was supposedly rehabilitated around 2000 or 2001. GPS data collected on the day of the survey suggests that the East Well is probably the well described in Water Right 51-4917 with the Division of Water Rights. That water right is owned by LAMC, L.L.C., Box 50238, Orem, UT 84605-0238. The water right information for WR 51-4917 on the DWRi web site lists a 6-inch well at 285' depth drilled in 1982. The web page also indicates that DWRi has a well log from the well driller.

The casing stickup out of the grassy area around the well is at least 24 inches. The sanitary seal, if there is one at all, is suspect. The casing appears to be simply driven into the earth with no evidence of grouting the annular space, if there was any, between the casing external surface and the borehole in the ground.

The power feed through the casing top to the submersible pump passes through a non-watertight slot in the casing cap. The slot needs to be silicone caulked, or similar.

There is an irrigation system hookup at a stop-and-waste valve at the wellhead. There is no backflow prevention device between the drinking water system and the irrigation water system.

The waterline to the school apparently ties into the well casing below grade, as would be typical of a pitless adapter. But, it is unlikely that the connection is anywhere near as sophisticated as a pitless

Date of Survey: *March 14, 2007*

adapter. It is likely that the casing merely tees below the ground surface. There is a hand hydrant barely a foot from the casing stickup and on the line that appears to head to East House. There is no evidence to suggest that this connection meets Division standards either.

2003 Survey

The well is 200-250 feet deep. The submersible pump is set at approximately 130 feet. The pump is replaced every 2-3 years because of the corrosivity of the water.

The wellhead needs a smooth-nosed sampling tap, a flow-measuring device, and a shut-off valve.

Wellhead plumbing is in the residence basement. The wellhead needs a smooth-nosed sampling tap, a flow-measuring device, and a shut-off valve.

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☑ Unknown

B. Well Seal [R309-204(Future 515)-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: *09/01/07* **0 or 50 Points:** *50*

There is no evidence of a well seal. The casing appears to be flush against the borehole sidewalls. The casing may have just been pounded into the ground.

C. Proper Lubrication Oil [R309-102-(4)(7) & R309-204(Future 515)-(8)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: _____ **0 or 25 Points:** *0*

N/A - submersible, water-lubricated pump

Date of Survey: *March 14, 2007*

D. Elevation of Top of Well Casing [R309-204[Future 515]-(6)(6)(b)(vl) & R309-204[Future 515]-(6)(13)(a)&(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points be assessed if a properly installed and approved pitless adapter is used. Range of points will will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: _____ **0 to 20 Points:** *0*

E. Well Discharge Piping Equipment [R309-204[Future 515]-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFIY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: _____ **0 to 5 Points:** *5*

Not one of these items is apparent at the wellhead.

F. Screening of Well Casing Vent [R309-515-6(12)(e) Guidance]

5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

To be fixed by: _____ **0 or 5 Points:** *5*

no apparent well casing vent

G. Discharge Piping Air Vent [R309-204[Future 515]-6(12)(e)(v)]

1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping directly into a distribution system. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

To be fixed by: 09/01/07 **0 to 5 Points:** *5*

no air/vacuum relief on wellhead line to residence

Date of Survey: *March 14, 2007*

H. Well House Floor Drain [R309-204 Future 515]-6(13)(b)]

1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

To be fixed by: _____ **0 to 5 Points:** *0*

No wellhouse

Total Points Assessed: *65*

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Is this source covered in a source protection plan? ☑ Yes ☐ No

Is a current well log available for this well? ☑ Yes ☐ No

Current flow rate: _____ gpm Size of Well Casing: *8* inches

Type of Pump: Vertical Turbine ☐ Yes Submersible ☑ Yes

Brand/Model of **Pump:** *Midwest-Dicken MFG* Discharge piping size: *6* inches

Brand/Model of **Motor:** _____ Horsepower: *5*

Voltage: _____

Is there a serviceable pressure gauge on the well pump discharge? ☐ Yes, Static ☐ Yes, Stagnation* ☑ No

* note: stagnation pressure includes velocity head but such gauges are uncommon

If yes:	_____ (psi)	*off* (gpm)	☑ Static	☐ Dynamic
	_____ (psi)	_____ (gpm)	☐ Static	☑ Dynamic
	_____ (psi)	_____ (gpm)	☐ Static	☑ Dynamic

Date of Survey: March 14, 2007

Is there a pump-to-waste line with an adequate air gap (twice pipe diameter)? ☐ Yes ☑ No

Distance to Surface Water ☐ <100 ft. ☐ 100 to 200 ft. ☑ >200 ft.

If there is a Pump House, is it secure? ☐ Yes ☐ No
Does it have adequate heating? ☐ Yes ☐ No
Does it have adequate lighting? ☐ Yes ☐ No
Does it have adequate ventilation? ☐ Yes ☐ No
Is floor elev.at least 6 in.above the surrounding ground elevation? ☐ Yes ☐ No

Other Observations/Comments for This Well:

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Well

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Source Number: WS002 **Source Name:** West Well (older than WS001 East Well)

Location: **Period of Use:** Year 'Round

Latitude: see below **Longitude:** see below

NAD 83 NAD 27 PLS

40° 6' 2.385806" (40.100066°) —> 40° 6' 2.54562" (40.10070712°) ----> S 68.46' E 741.65' N4 S28 T08S R03E

111° 36' 16.088688" (111.60446908°) 111° 36' 13.37978" (111.6037166°)

2007 GPS Readings

2006 Survey

The operator reports that the West Well may date back 50 years and was probably the first well drilled on the property back when it was an orchard and farm. GPS data collected on the day of the survey suggests that this well is probably the well described in Water Right 51-4729 with the Division of Water Rights. That water right is owned by LAMC, L.L.C., Box 50238, Orem, UT 84605-0238. The water right information for WR 51-4729 on the DWRi web site lists an 8-inch well at 280' depth. There is no entry in the information for the tear that the well was drilled.

The 2003 survey report of a brick "structure" at the well is inaccurate. The casing protrudes from the ground in a small, square collar about 18"' x 18"'. This four-sided collar may be constructed of cinder block bricks but it is hardly a "structure." It looks like a simple, bottomless valve box.

The casing stickup is substandard, perhaps only 6 inches in the 18-inch deep, below-grade valve box. Thus, the casing top is below ground in an undrained "vault." The valve box is stuffed with some insulation and is covered at ground level with an unsecured piece of plywood that is weighted down by 3-4 rocks. The operator reports that the insulating foam is necessary to prevent freezing at the wellhead.

There is a plugged port in the casing cap. This port appears to be the type through which at one time there may have been an air tube type of depth-to-water measurement. The flat power ribbon slot through the casing cap is not water tight. The slot needs to be plugged with silicone caulk or similar.

Date of Survey: March 14, 2007

The 8-inch well casing stickup discharges through a 1-1/2" brass nipple that then couples to 1-1/2" galvanized iron pipe that heads to West House's basement. The line has switched to 1-1/2" copper by the time it enters West House's basement.

The West Well is plagued by bad taste probably due to iron and sulfide in the well water. There is a chlorination process ther (which the operator said was dictated by the Division some years ago due to bad bacteriological sample results. The chlorine solution pump is a Chem-Tech Metering Pulsafeeder pump model from Punta Gorda, FL. The pump takes suction from a 30-gallon carbuoy of concentrated sodium hypochlorite solution. There was no label or NSF sticker on the carbuoy. The operator said that it may be T-Chlor from Thatcher Chemical Company in Salt Lake City. The chlorine metering pump powers up whenever the pressure-trol device at the well pump control box signals that the well pump has turned on.

The operator claims that the West Well never had taste and odor problems until the East Well was renovated.

There are two Amtrol WX-350 hydropneumatic (bladder) tanks on the waterline downstream of chlorination. The operator reports that it takes less than a minute of well pumping to refill the hydropneumatic tanks when low pressure signals the well pump to turn on. The cycle is 40 to 60 psi.

The outlet line from the hydropneumatic tanks tees to send water for cold water uses directly throughout the rest of the house and water for the hot water heaters first through a filter cartridge and water softener. The off-the-shelf cartridges fit in an approximately 36-inch long x 4-inch diameeter cylindrical housing. The operator agreed to find information on the cartridge brand, pore size, etc., and forward it to the Division.

The water softener is a salt exchange-based unit.

There is no flowmeter on the waterline in the basement of West House from West Well. There is a sizeable drain in the basement floor.

The operator asked questions about the feasibility of installing reverse osmosis treatment. It was brought to his attention that there is sometimes a rather voluminous flow of reject water from RO, as much as 90 percent of the influent flow in some cases. Depending on the water quality of the RO reject water, it might be possible to discharge it to West House's 100,000 gallon "fish pond."

Date of Survey: March 14, 2007

2003 Survey

The wellhead needs a smooth-nosed sampling tap, a flow-measuring device, and a shut-off valve. The casing needs to stick up at least 18 inches above ground.

The wellhead is surrounded by a brick enclosure. The top of the well casing is the same absolute elevation as the natural ground elevation but the brick enclosure's floor has been dug out so that the casing sticks up 18 inches above the resulting floor level in the brick enclosure.

Wellhead plumbing is in the residence basement. The wellhead needs a smooth-nosed sampling tap, a flow-measuring device, and a shut-off valve.

The well is 200-250 feet deep. The submersible pump is set at approximately 130 feet. The pump is replaced about every 3 years because of the corrosivity of the water.

Fire Department officials supposedly will not require additional storage as long as the population of the facility does not exceed 18 persons. The facility includes an uncovered storage pond for fire emergency water.

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☑ Unknown

B. Well Seal [R309-204[Future 515]-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: 09/01/07 **0 or 50 Points:** 50

There is no evidence of a well seal. The casing appears to be flush against the borehole sidewalls. The casing may have just been pounded into the ground.

C. Proper Lubrication Oil [R309-102-(4)(7) & R309-204[Future 515]-(8)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: _____ **0 or 25 Points:** 0

N/A - submersible, water-lubricated pump

Date of Survey: *March 14, 2007*

D. Elevation of Top of Well Casing {R309-204[Future 515]-(6)(6)(b)(vi) & R309-204[Future 515]-(6)(13)(a)&(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points be assessed if a properly installed and approved pitless adapter is used. Range of points will will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: _____ **0 to 20 Points:** *0*

E. Well Discharge Piping Equipment [R309-204[Future 515]-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFIY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: _____ **0 to 5 Points:** *5*

Not one of these items is apparent at the wellhead.

F. Screening of Well Casing Vent [R309-515-6(12)(e) Guidance]

5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

To be fixed by: _____ **0 or 5 Points:** *5*

no apparent well casing vent

G. Discharge Piping Air Vent [R309-204[Future 515]-6(12)(e)(v)]

1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping directly into a distribution system. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

To be fixed by: 09/01/07 **0 to 5 Points:** *5*

no air/vacuum relief on wellhead line to residence

Date of Survey: March 14, 2007

H. Well House Floor Drain [R309-204[Future 515]-6(13)(b)]
1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

To be fixed by: _____ 0 to 5 Points: 0

No wellhouse

Total Points Assessed: 65

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Is this source covered in a source protection plan? ☑ Yes ☐ No

Is a current well log available for this well? ☐ Yes ☑ No

Current flow rate: _____ gpm Size of Well Casing: 8 inches

Type of Pump: Vertical Turbine ☐ Yes Submersible ☑ Yes

Brand/Model of Pump: _____ Discharge piping size: 6 inches

Brand/Model of Motor: _____ Horsepower: 5

Voltage: _____

Is there a serviceable pressure gauge on the well pump discharge? ☐ Yes, Static ☐ Yes, Stagnation* ☑ No

* note: stagnation pressure includes velocity head but such gauges are uncommon

If yes: _____ (psi) off (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

Date of Survey: *March 14, 2007*

Is there a pump-to-waste line with an adequate air gap (twice pipe diameter)? ☐ Yes ☑ No

Distance to Surface Water ☐ <100 ft. ☐ 100 to 200 ft. ☑ >200 ft.

If there is a Pump House, is it secure? ☐ Yes ☐ No
Does it have adequate heating? ☐ Yes ☐ No
Does it have adequate lighting? ☐ Yes ☐ No
Does it have adequate ventilation? ☐ Yes ☐ No
Is floor elev.at least 6 in.above the surrounding ground elevation? ☐ Yes ☐ No

Other Observations/Comments for This Well:

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Well

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Source Number: WS003 **Source Name:** Far East Well

Location: **Period of Use:** Year 'Round

Latitude: see below **Longitude:** see below

NAD 83	NAD 27	PLS
40° 6' 1.22657" (40.10034°)	--> 40° 6' 1.38633" (40.100385°)	---> S 188.53' E 1154.70' N4 S28 T08S R03E
111° 36' 10.760846" (111.602989124°)	111° 36' 8.05234" (111.6022368°)	

2007 GPS Readings

2006 Survey

The Far East Well was renovated by Robert Perry Pump Contractor (801-358-7667). The contractor supposedly replaced the old pump and cleaned out the well casing. The casing size is 6 inches.

The casing stickup out of the grassy area around the well is at least 24 inches. The sanitary seal, if there is one at all, is suspect. The casing appears to be simply driven into the earth with no evidence of grouting the annular space, if there was any, between the casing external surface and the borehole in the ground.

There is an irrigation system hookup at a stop-and-waste valve at the wellhead. There is no backflow prevention device between the drinking water system and the irrigation water system.

There is a hand hydrant near the casing stickup and on the line that appears to head to Far East House. There is no evidence to suggest that this connection meets Division standards either.

There is no hydropneumatic tank on the Far East Well distribution system. Rather, a VFD for the pump motor takes a pressure signal from the Far East House waterlines and adjusts the pump motor speed to ramp up or down as needed.

Date of Survey: *March 14, 2007*

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☐ Unknown

B. Well Seal [R309-204[Future 515]-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: *09/01/07* **0 or 50 Points:** *50*

There is no evidence of a well seal. The casing appears to be flush against the borehole sidewalls. The casing may have just been pounded into the ground.

C. Proper Lubrication Oil [R309-102-(4)(7) & R309-204[Future 515]-(8)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: _____ **0 or 25 Points:** *0*

N/A - submersible, water-lubricated pump

D. Elevation of Top of Well Casing [R309-204[Future 515]-(6)(6)(b)(vi) & R309-204[Future 515]-(6)(13)(a)&(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points be assessed if a properly installed and approved pitless adapter is used. Range of points will will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: _____ **0 to 20 Points:** *0*

E. Well Discharge Piping Equipment [R309-204[Future 515]-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFIY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: _____ **0 to 5 Points:** *5*

Not one of these items is apparent at the wellhead.

Date of Survey: March 14, 2007

F. Screening of Well Casing Vent [R309-515-6(12)(e) Guidance]
5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

To be fixed by: _____ **0 or 5 Points:** 5

no apparent well casing vent

G. Discharge Piping Air Vent [R309-204(Future 515)-6(12)(e)(v)]
1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping directly into a distribution system. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

To be fixed by: 09/01/07 **0 to 5 Points:** 5

no air/vacuum relief on wellhead line to residence

H. Well House Floor Drain [R309-204(Future 515)-6(13)(b)]
1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

To be fixed by: _____ **0 to 5 Points:** 0

No wellhouse

Total Points Assessed: 65

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Is this source covered in a source protection plan? ☑ Yes ☐ No

Is a current well log available for this well? ☐ Yes ☑ No

Current flow rate: _____ gpm Size of Well Casing: 6 inches

Type of Pump: Vertical Turbine ☐ Yes Submersible ☑ Yes

Brand/Model of **Pump:** _____ Discharge piping size: 6 inches

Brand/Model of **Motor:** _____ Horsepower: 5

Voltage: _____

Date of Survey: March 14, 2007

Is there a serviceable pressure gauge on the well pump discharge? ☐ Yes, Static ☐ Yes, Stagnation* ☑ No

* note: stagnation pressure includes velocity head but such gauges are uncommon

If yes: _____ (psi) ___oft___ (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

Is there a pump-to-waste line with an adequate air gap (twice pipe diameter)? ☐ Yes ☑ No

Distance to Surface Water ☐ <100 ft. ☐ 100 to 200 ft. ☑ >200 ft.

If there is a Pump House, is it secure? ☐ Yes ☐ No

Does it have adequate heating? ☐ Yes ☐ No

Does it have adequate lighting? ☐ Yes ☐ No

Does it have adequate ventilation? ☐ Yes ☐ No

Is floor elev.at least 6 in.above the surrounding ground elevation? ☐ Yes ☐ No

Other Observations/Comments for This Well:

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Well

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Source Number: N/A **Source Name:** Stinky Well

Location: **Period of Use:** Abandoned

Latitude: see below **Longitude:** see below

NAD 83 NAD 27 PLS

40° 5' 52.045858" (40.097791°) ---> 40° 5' 52.20563" (40.0978349°) ---> S 1117.84' E 1246.84' N4 S28 T08S R03E

111° 36' 9.493744" (111.60264°) 111° 36' 6.78529" (111.60188°)

2007 GPS Readings

2006 Survey

This well is an abandoned well on the New Haven Girls Home property.

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☐ Unknown

B. Well Seal [R309-204[Future 515]-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: **0 or 50 Points:** 0

C. Proper Lubrication Oil [R309-102-(4)(7) & R309-204[Future 515]-(6)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: **0 or 25 Points:** 0

Date of Survey: *March 14, 2007*

D. Elevation of Top of Well Casing [R309-204[Future 515]-(6)(6)(b)(vi) & R309-204[Future 515]-(6)(13)(a)&(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points be assessed if a properly installed and approved pitless adapter is used. Range of points will will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: _____ **0 to 20 Points:** *0*

E. Well Discharge Piping Equipment [R309-204[Future 515]-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFIY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: _____ **0 to 5 Points:** *0*

F. Screening of Well Casing Vent [R309-515-6(12)(e) Guidance]

5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

To be fixed by: _____ **0 or 5 Points:** *0*

G. Discharge Piping Air Vent [R309-204[Future 515]-6(12)(e)(v)]

1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping directly into a distribution system. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

To be fixed by: _____ **0 to 5 Points:** *0*

Date of Survey: March 14, 2007

H. Well House Floor Drain [R309-204|Future 515]-6(13)(b)]

1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

To be fixed by: _____ **0 to 5 Points:** 0

_____

_____

_____

Total Points Assessed: 0

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Is this source covered in a source protection plan? ☐ Yes ☐ No

Is a current well log available for this well? ☐ Yes ☐ No

Current flow rate: _____ gpm Size of Well Casing: _____ inches

Type of Pump: Vertical Turbine ☐ Yes Submersible ☐ Yes

Brand/Model of **Pump:** _____ Discharge piping size: _____ inches

Brand/Model of **Motor:** _____ Horsepower: _____

Voltage: _____

Is there a serviceable pressure gauge on the well pump discharge? ☐ Yes, Static ☐ Yes, Stagnation* ☑ No

* note: stagnation pressure includes velocity head but such gauges are uncommon

If yes: _____ (psi) off (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

_____ (psi) _____ (gpm) ☐ Static ☐ Dynamic

Date of Survey: *March 14, 2007*

Is there a pump-to-waste line with an adequate air gap (twice pipe diameter)? ☐ Yes ☐ No

Distance to Surface Water ☐ <100 ft. ☐ 100 to 200 ft. ☐ >200 ft.

If there is a Pump House, is it secure? ☐ Yes ☐ No
Does it have adequate heating? ☐ Yes ☐ No
Does it have adequate lighting? ☐ Yes ☐ No
Does it have adequate ventilation? ☐ Yes ☐ No
Is floor elev.at least 6 in.above the surrounding ground elevation? ☐ Yes ☐ No

Other Observations/Comments for This Well:

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Well

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Source Number: N/A **Source Name:** Orchard Well

Location: **Period of Use:** Abandoned

Latitude: see below **Longitude:** see below

NAD 83 NAD 27 PLS

40° 5' 55.64404" (40.09879°) --> 40° 5' 53.80390" (40.09883442°) ----> S 748.97' E 527.33' N4 S28 T08S R03E

111° 36' 18.78836" (111.605219°) 111° 36' 16.07920" (111.6044664°)

2007 GPS Readings

2006 Survey

This well is an abandoned well on the New Haven Girls Home property.

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☐ Unknown

B. Well Seal [R309-204[Future 515]-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: **0 or 50 Points:** 0

C. Proper Lubrication Oil [R309-102-(4)(7) & R309-204[Future 515]-(8)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: **0 or 25 Points:** 0

Date of Survey: *March 14, 2007*

D. Elevation of Top of Well Casing [R309-204[Future 515]-(6)(6)(b)(vi) & R309-204[Future 515]-(6)(13)(a)&(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points be assessed if a properly installed and approved pitless adapter is used. Range of points will will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: _____ **0 to 20 Points:** *0*

E. Well Discharge Piping Equipment [R309-204[Future 515]-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFIY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: _____ **0 to 5 Points:** *0*

F. Screening of Well Casing Vent [R309-515-6(12)(e) Guidance]

5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

To be fixed by: _____ **0 or 5 Points:** *0*

G. Discharge Piping Air Vent [R309-204[Future 515]-6(12)(e)(v)]

1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping directly into a distribution system. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

To be fixed by: _____ **0 to 5 Points:** *0*

Date of Survey: March 14, 2007

H. Well House Floor Drain [R309-204[Future 515]-6(13)(b)]
1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

To be fixed by: _____ **0 to 5 Points:** 0

_____

_____

_____

Total Points Assessed: 0

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Is this source covered in a source protection plan? ☐ Yes ☐ No

Is a current well log available for this well? ☐ Yes ☐ No

Current flow rate: _____ gpm Size of Well Casing: _____ inches

Type of Pump: Vertical Turbine ☐ Yes Submersible ☐ Yes

Brand/Model of **Pump:** _____ Discharge piping size: _____ inches

Brand/Model of **Motor:** _____ Horsepower: _____

Voltage: _____

Is there a serviceable pressure gauge on the well pump discharge? ☐ Yes, Static ☐ Yes, Stagnation* ☑ No

* note: stagnation pressure includes velocity head but such gauges are uncommon

If yes:	_____ (psi)	off (gpm)	☐ Static	☐ Dynamic
	_____ (psi)	_____ (gpm)	☐ Static	☐ Dynamic
	_____ (psi)	_____ (gpm)	☐ Static	☐ Dynamic

Date of Survey: March 14, 2007

Is there a pump-to-waste line with an adequate air gap (twice pipe diameter)? ☐ Yes ☑ No

Distance to Surface Water ☐ <100 ft. ☐ 100 to 200 ft. ☑ >200 ft.

If there is a Pump House, is it secure? ☐ Yes ☐ No

Does it have adequate heating? ☐ Yes ☐ No

Does it have adequate lighting? ☐ Yes ☐ No

Does it have adequate ventilation? ☐ Yes ☐ No

Is floor elev.at least 6 in.above the surrounding ground elevation? ☐ Yes ☐ No

Other Observations/Comments for This Well:

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

2. Intertie

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork System #: 25159

Source Number: _____ **Source Name:** Spanish Fork City

Location: _____ **Period of Use:** Future

Latitude: N 40º XX' XX" **Longitude:** W 109º XX' XX"

Note: The water system asked for, and received, a three-year exception to tide it over until Spanish Fork City water system expansion to new service areas would run past the New Haven Girls Home and allow abandonment of the New Haven Girls Home wells in favor of water purchase from Spanish Fork City.

Spanish Fork City's Richard Heap estimates $60,000 is the cost of extending service to the New Have Girls Home.

A. Was Plan Approval received for this interconnection ? ☐ Yes ☐ No ☐ Unknown

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

4. Disinfection Facilities Liquid Hypochlorite

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Disinfection Station Number/I.D. _____ **Station Name:** _____

Location: _____ **Period of Use:** _____

Source(s) Treated _____
(include source number(s) and name(s))

A. Was Plan Approval received for this Chlorinator? ☐ Yes ☐ No ☐ Unknown

B. Detectable Residual
[R309-105-10(1), R309-200 Future 110-5(7), R309-545-4(7)(4), R309-210-10, & R309-520-15(2)]
10 points will be assessed to a chlorinated water system that does not maintain a chlorine residual at all times.

To be fixed by: _____ **0 or 10 Points:** 0

C. Chlorine Building [R309-520-10(1)(l)]
2 points will be assessed for each chlorine building that is not properly heated, lighted and vented. Ventilation must include exhausting room air at or near floor level. Heating may be unnecessary in warm climates.

To be fixed by: _____ **0 or 2 Points:** 0

D. Chlorine Residual Test Kit [R309-520-10(1)(j)]
2 points will be assessed to a chlorinated water system that does not have a functional chlorine residual test kit.

To be fixed by: _____ **0 or 2 Points:** 0

Date of Survey: *March 14, 2007*

E. Spare Parts for Hypochlorinator [R309-520-10(1)(k)]

2 points will be assessed to a chlorinated water system that does not have a spare parts kit on hand to repair or replace the hypochlorinator.

To be fixed by: _____ **0 or 2 Points:** *0*

F. Measurement of Chlorinated Water [R309-520-10(1)(l)]

2 points will be assessed to a water system that does not have a means of measuring the volume of water treated with chlorine.

To be fixed by: _____ **0 or 2 Points:** *0*

Total Points Assessed: *0*

ADDITIONAL REQUIRED INFORMATION (no points assessed)

What condition is the chlorine building in? ☐ Good ☐ Average ☐ Poor

Is a booster pump used for the chlorinator? ☐ Yes ☐ No

Hypochlorinator Brand _____ Model _____

Size _____ Capacity _____

Average Feed Rate _____ Solution Concentration _____

Other Observations or Comments: _____

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

5. Storage Reservoir

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork **System #:** 25159

Reservoir Number: 0 **Reservoir Name:** Hydropneumatic Tanks

Location: West (2 @ 150 gal. ea.), East (2 @ 150 gal. ea.), and Far East (1 @ 25 gal.) Houses

Latitude: N 40º XX' XX" **Longitude:** W 109º XX' XX"

Volume: _____ (gal) **Dimensions:** _____

Construction Year: _____ **Material:** Steel/Hydropneumatic/Bladder

2007 Survey

Hydropneumatic tanks do not qualify as "real" storage. The working volume of each Amtrol WX-350 is about 50 gallons.

West Well —> 1-1/2" G.I.P.PVC —> 1-1/2" copper —> Cl_2 —> 2 Amtrol WX-350 in series —> Cold Water

—> Filter —> Softener —> Hot Water

East Well —> PVC —> 1-1/2" copper —> 2 Amtrol WX-350 in series —> Cold Water

—> Filter —> Softener —> Hot Water

Far East Well —> PVC —> 1-1/2" copper —> tiny Amtrol Tank (VFD modulates well pump for system pressure)

2003 Survey

Fire Department officials supposedly will not require additional storage as long as the population of the facility does not exceed 18 persons. The facility includes an uncovered storage pond for fire emergency water.

Date of Survey: *March 14, 2007*

A. Was Plan Approval received for this Storage Unit? ☐ Yes ☐ No ☐ Unknown

B. Uncovered Finished Water Storage [R309-545-9 & R309-545-6]

A water system with an uncovered finished water storage shall immediately be assessed a rating of NOT APPROVED.

Uncovered Reservoir? ☐ Yes ☐ No

C. Storage Reservoir Access [R309-545-14]

10 points shall be assessed for a water storage reservoir's access cover that is not an overlapping (shoe box) type lid, that is not locked, gasketed, and does not extend at least 4 inches above the top of the tank or finished grade.

To be fixed by: _____ **0 or 10 Points:** *0*

D. Storage Reservoir Vents [R309-545-15]

5 points shall be assessed for storage reservoirs that are not properly vented with a turned down vent and screened with at least No. 14 mesh screen or finer in good condition.

To be fixed by: _____ **0 or 5 Points:** *0*

E. Storage Reservoir Overflow Piping [R309-545-13]

Up to 15 points shall be assessed to a reservoir that has an overflow that is either 1) unscreened with a minimum of no. 4 mesh screen, 2) inadequately sized, 3) improperly sloped, and/or 4) without at least 12 inches of free fall or an adequate air gap if connected to the sewer. Number of points assigned shall be determined by the number and severity of the above-mentioned items.

To be fixed by: _____ **0 to 15 Points:** *0*

F. Storage Reservoir Drainage [R309-545-10(1)]

2 points shall be assessed for a reservoir which does not have an adequate drain line that is properly screened with at least no. 4 mesh and 12 inches free fall.

To be fixed by: _____ **0 or 2 Points:** *0*

Date of Survey: March 14, 2007

G. Integrity of Roof and Sidewalls of Water Storage Reservoirs [R309-545-6(1) & R309-545-9(1)]
Up to 50 points shall be assessed to a reservoir that has cracks and/or other unprotected openings in the roof or sidewalls which are not water tight, or which may affect the structural integrity of the reservoir. Points shall be determined by the severity of problems and by the degree of possible contamination to the drinking water, rodents, birds, and/or any other means permitted by the deficiency in the roof or walls of the reservoir.

To be fixed by: _____ **0 to 50 Points:** 0

H. Access Ladders and Protective Railings [R309-545-19]
2 points shall be assessed for each storage reservoir that does not have a safe and serviceable access ladder and/or protective railings where required.

To be fixed by: _____ **0 or 2 Points:** 0

I. Internal Coatings of Storage Reservoirs [R309-545-11]
30 points shall be assessed for each storage reservoir that has internal coatings that are not in compliance with ANSI/NSF Standard 61.

To be fixed by: _____ **0 or 30 Points:** 0

Total Points Assessed: 0

ADDITIONAL REQUIRED INFORMATION (No points assessed)

When was Storage Reservoir last cleaned? _____ (Year)

Other Observations/Comments for Reservoir: _____

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

6. Distribution System

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork System #: 25159

2006 Survey

Each of the three active wells (i.e., two in "exception granted" status and one not approved) has a distinct distribution system. Waters from different wells never mingle. The operator has the following understanding of pipe materials in the distribution systems:

West Well —> 1-1/2" G.I.P.PVC —> 1-1/2" copper —> Cl_2 —> 2 Amtrol WX-350 in series —> Cold Water

—> Filter —> Softener —> Hot Water

East Well —> PVC —> 1-1/2" copper —> 2 Amtrol WX-350 in series —> Cold Water

—> Filter —> Softener —> Hot Water

Far East Well —> PVC —> 1-1/2" copper —> tiny Amtrol Tank (VFD modulates well pump for system pressure)

The treatment for iron and sulfide taste and odor is via flow-through cartridge housings. The operator exhibited the off-the-shelf cartridges which appeared to be very fine in pore size. There was no product literature available but the operator agreed to research the matter for the Division.

The water softeners in West and East Houses are salt exchange softeners.

The Amtrol WX-350 hydropneumatic (bladder) tanks have face plates that indicate 38-125 psi, namely, a 38 psi factory precharge and a 125 psi maximum working pressure.

The well of most recent renovation, the Far East Well, has a Franklin Subdrive VFD that modulates the well pump motor speed to keep pressure in the Far East House water pipes. A pressure senser signals the VFD. This eliminates the need for traditional hydropneumatic (bladder) tanks.

There appears to be an in-line sand-trapping cartridge in the Far East House on the Far East Well waterline from the wellhead.

Date of Survey: *March 14, 2007*

2003 Survey

No points were assessed for inadequate storage capacity. An outside pool with liner can be used for fireflow water in an emergency.

A. Was *Plan Approval* received for this Distribution System? ☐ Yes ☐ No ☐ Unknown

B. System Pressures [R309-105-9 & R309-550-5(1)]

50 points will be assessed to a water system which fails to provide at least 20 psi at all service connections within the water system at all times, including peak instantaneous flow conditions.

To be fixed by: _____ **0 or 50 Points:** *0*

C. Adequate System Source Capacity [R309-510-7(1)]

5 to 50 points may be assessed to a system that does not have adequate source capacity to meet peak daily and/ or average yearly flow requirements. The number of points shall be determined by the severity and frequency of shortages, outages or low pressure.

Existing: _____ gpm

DDW Calculate: _____ gpm

Difference: _____ gpm

To be fixed by: _____ **0 or 50 Points:** *0*

D. Adequate System Storage Capacity [R309-510-8]

5 to 50 points may be assessed to a system that does not have adequate storage capacity to meet peak daily flow requirements. The number of points shall be determined by the severity frequency of shortages and/or water outages.

Existing: _____ gal

DDW Calculate: _____ gal

Difference: _____ gal

To be fixed by: _____ **0 or 50 Points:** *50*

Date of Survey: March 14, 2007

E. Piping Materials [R309-550-6]

30 points will be assessed to a water system that uses unapproved pipe, fittings, or materials for conveyance of drinking water. Piping and fittings must be NSF approved and/or meet AWWA Standards or other appropriate approvals. Abestos cement pipe that has successfully passed a distribution system asbestos monitoring program according to Drinking Water Rules shall not be assessed any points.

To be fixed by: _____ **0 or 30 Points:** 0

F. Clearance from Sewer Lines [R309-550-7]

30 points will be assessed to a water system that has improperly installed water lines which do not have adequate clearance or separation from sewer lines.

To be fixed by: _____ **0 or 30 Points:** 0

G. Vent Piping on Air and Vacuum Release Valves [R309-550-6(6)(a)]

Up to 2 points shall be assessed each air and/ or vacuum released valve that does not have a properly turned down screen vent, for a maximum total of 20 points possible.

To be fixed by: _____ **0 to 20 Points:** 0

H. Flooded Air and Vacuum Release Valves [R309-550-6(6)(b)]

20 points will be assessed to a water system for each air and/or vacuum releases valve chamber that is flooded or subject to flooding, where there is indication that the vent is subject to flooding,where there is indication that the vent is subject to submergence with a total possible of 50 points for the system.

To be fixed by: _____ **0, 20, 40 or 50 Pts:** 0

Total Points Assessed: 50

Date of Survey: *March 14, 2007*

ADDITIONAL REQUIRED INFORMATION (no points assessed)

Does the water system provide fire protection? ☐ Yes ☑ No

If yes, how many hydrants? _____

Does the water system have a periodic flushing program? ☐ Yes ☐ No

Does the flushing program include hydrant maintenance? ☐ Yes ☐ No

Does the water system have dead end water lines? ☐ Yes ☐ No

Does the water system have pressure zones? ☐ Yes ☐ No

If yes, how many? _____

What are pressure ranges throughout the system (psi)? (low) *50* (high) *80*

What are the ranges of the different pressure zones?

Pressure Zone Area	psi range	Controls		
		Automatic	Manual	Remote
1	*50-80*	*x*		

Other Observations or Comments: _____

Date of Survey: March 14, 2007

PRV Station Number: N/A

PRV Number(s): _____ PRV Name: _____

Location: _____

Latitude: N 40º XX' XX" Longitude: W 109º XX' XX"

Upstream Pressure: _____ (psi) Downstream Pressure: _____ (psi)

Brand/Model of PRV: _____

Main piping size: _____ inches Bypass piping size: _____ inches

Does the main p.r.v. have a low flow bypass with a small secondary p.r.v.?	☐ Yes	☐ No	
Is there a serviceable compound pressure gauge upstream of the main p.r.v.?	☐ Yes	☐ No	
Is there a serviceable compound pressure gauge downstream of the main p.r.v?	☐ Yes	☐ No	
If there is a p.r.v. vault, is it adequately drained?	☐ Yes	☐ No	☐ No Vault
Is there a serviceable compound pressure gauge downstream on the low flow bypass?	☐ Yes	☐ No	
Is there a serviceable compound pressure gauge upstream on the low flow bypass?	☐ Yes	☐ No	

_____

_____

_____

_____

_____

_____

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

9. Conclusions

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork System #: 25159

These items MUST BE COMPLETED as noted in accordance with the Utah Public Drinking Water Rules.

The New Haven Girls Home water system managers should vigorously pursue annexation by Spanish Fork City. The latest estimate on cost is $60,000.

Because the 2007 sanitary survey revealed an unapproved water source (the Far East Well), the Division has no choice but to reclassify the water system as "not approved."

In addition to the use of an unapproved water source, the water system has other major problems including unapproved chlorination equipment at the West Well, unapproved irrigation systems tied into each of the three wells, and a nonexistent backflow prevention program.

Date of Survey: March 14, 2007

DRINKING WATER FACILITY EVALUATION

10. Recommendations

(Field Interview/Inspection)

System Name: New Haven Girls Home, Spanish Fork System #: 25159

These items should be completed as noted to protect the integrity and/or reliability of the drinking water system and in accordance with anticipated E.P.A. requirements.

The New Haven Girls Home water system managers should vigorously pursue annexation by Spanish Fork City. The latest estimate on cost is $60,000.

Sanitary Survey - Survey Responses

PWS Number: UTAH25159 **Survey ID:** 578 **Survey Date:** 4/12/2007

Survey Name: NEW HAVEN-SPANISH FK CAN **User Name:** Steven Onysko

Question Number		

General / Background Info

Name/Location:

1	Name of public water system:	NEW HAVEN-SPANISH FK CAN
2	PWS number:	UTAH25159
3	Physical address	2096 East 7200 South Fork, UT 84660
4	County:	Utah
5	Local Health Department	☐ Bear River HD ☐ Central Utah HD ☐ ☐ Salt Lake County HD

Sanitary Survey - Survey Responses

PWS Number: UTAH25159 **Survey ID:** 578 **Survey Date:** 4/12/2007

Survey Name: NEW HAVEN-SPANISH FK CAN **User Name:** Steven Onysko

Question Number

General / Background Info

Name/Location:

1 Name of public water system: NEW HAVEN-SPANISH FK CAN

2 PWS number: UTAH25159

3 Physical address: 2096 East 7200 South
Fork, UT 84660

4 County: Utah

5 Local Health Department

- ☐ Bear River HD
- ☐ Central Utah HD
- ☐ Davis County HD
- ☐ Salt Lake County HD
- ☐ Southeast Utah HD
- ☐ Southwest Utah HD
- ☐ Summit County HD
- ☐ Tooele County HD

General / Background Info

Classification:

1 Total System - Design Water Production / Treatment Capacity (MGD): 0

Notes: Three wells - operator does not know gpm

2 Actual average daily demand (MGD): 0

Notes: Three wells - operator does not know gpm

3 Actual peak daily demand (MGD): 0

Notes: Three wells - operator does not know gpm

4 SDWA classification of system

- ☐ C - Community
- ☐ NC - Non Community transient
- ☐ NP - Non Public
- ☑ NTNC - Non Transient Non Co

5 **Number of service connections:**

Question Number		
5.01	Number of residential connections:	3
	Notes: Three houses that serve 42 young women and 140 support staff.	
5.02	Number of commercial and industrial connections.	0
5.03	Number of other connections.	0
6	Residential population:	212
	Notes: 42 young women and 170 support staff	
7	**Seasonal operation?**	☐ Yes ☑ No ☐ NA ☐ Unknown
7.01	Numeric calendar Month of opening:	1
7.02	Numeric calendar Day of opening.	1
7.03	Numeric calendar Month of closing.	12
7.04	Numeric calendar Day of closing.	31
8	**Purchase water?**	☐ Yes ☑ No ☐ NA ☐ Unknown
	Notes: The facility would eventually like to abandon its wells and buy wholesale from spanish Fork City.	
8.1	If yes, name of system purchased from:	
8.2	System purchased from - PWS number:	
9	**Sell water?**	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
9.01	If yes, name of system sell to:	
9.02	System(s) sold to PWS number:	

General / Background Info

Owner:

1	Owner type:	☐ F - Federal ☐ L - Local ☐ M - Mixed ☐ N - Native American ☑ P - Private ☐ S - State Government
2	Legal ownership by (name or entity)	Solacium (Real Estate) Holdings
3	Principal Executive or CEO, Last Name	Kilpatrick
4	Principal Executive or CEO, First Name	Casey
5	Owner's address	2096 E 7200 S
6	Owner's address - City	SPANISH FORK
7	Owner's address - State	☑ UT
8	Owner's address - Zip code	84660
9	Owner's telephone	801-380-4377

General / Background Info

Staff:

1	System Manager's Last name	HONE

Question Number		
2	System Manager's First name	JIM
3	System Manager's address	2096 E 7200 S
4	System Manager's telephone	801-380-4375
6	Main Operator's name	Jim Hone
7	Main Operator's address	2096 East 7200 South, Spanish Fork, UT 84660
8	Main Operator's telephone	801-380-4375
10	Main Operator's Certification Level	Not Certified
11	Emergency phone number.	801-380-4375
12	System FAX number.	8013804375

General / Background Info

Previous Survey Info:

1	Date of last sanitary survey:	07/17/03
2	Last survey conducted by	Janet Keller
3	List of deficiencies from previous survey	appurtenances at both wellheads, West Well stickup & sanitary seal

Question Number

General / SDWIS Site Visit Info

1	Reason for the visit.	☑ SNSV - Sanitary Survey ☐ SSVF - Sanitary Survey Follow- ☐ SHAZ - Sanitary Hazards Invest ☐ TRTP - Water Treatment Plant ☐ TRNG - Training ☐ LABC - Laboratory certificat ☐ EMRG - Emergency assistan ☐ ENGR - Engineering
4	Date of the survey	03/14/2007
5	Survey Status	☑ C - Completed ☐ P - Planned
6	Last name of surveyor:	Onysko
7	First name of surveyor.	Steve
8	Surveyor's organization	Utah Division of Drinking Water
9	Surveyor phone number	801-536-0096
10	Surveyor e-mail	sonysko@utah.gov
11	Water system representatives present during the survey:	Jim Hone
12	Official notification of report results sent to water system.	04/13/2007

Regulations / Plans/Records

1	Does the (TCR) sample site plan meet the minimum requirements? (Answer no, if no plan is present)	☐ Yes ☐ No ☐ NA ☑ Unknown

Management / General

1	**Does the system haul water?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Is the water system a community water system?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.02	For non-community public water systems is there any other way to supply good quality drinking water?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Are the DDW guidelines for water hauling followed? (ie draw water from an approved source, periodically clean and disinfect equipment, load, disinfect water and unload water properly)	☐ Yes ☐ No ☐ NA ☐ Unknown
2	Have there been any customer complaints about a new taste, odor, color, or other physical change (oily, filmy, burns on contact with skin, etc) with regard to the water provided?	☐ Yes ☑ No ☐ NA ☐ Unknown
3	Is there a procedure in place to respond immediately to such customer complaint?	☑ Yes ☐ No ☐ NA ☐ Unknown

Management / Planning

General:

1	**The system does not meet the required source capacity requirements? (Answer "No" if source capacity is adequate, use Excel spreadsheet for calculations)** Notes: There are two wells that were granted construction exceptions two years ago, and a third unapproved well, that seem to yield more than enough source supply but without flowmeters that would establish the exact production rate.	☐ Yes ☐ No ☐ NA ☑ Unknown
1.01	Does the system meet a minimum of 90% of the required source capacity?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.02	Does the system meet a minimum of 80% of the required source capacity?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Does the system meet a minimum of 70% of the required source capacity?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.04	Does the system meet a minimum of 60% of the required source capacity?	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
1.05	Does the system meets less than 60% of the required source capacity?	☐ Yes ☐ No ☐ NA ☐ Unknown
2	**The system does not meet the required storage capacity requirements? (Answer "No" if storage capacity is adequate, use Excel spreadsheet for calculations)**	☑ Yes ☐ No ☐ NA ☐ Unknown
	Notes: No conventional storage capacity. Hydropneumatic tanks at the West Well and East Well do not quality as legitimate storage capacity.	
2.01	Does the system meet a minimum of 90% of the required storage capacity?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.02	Does the system meet a minimum of 80% of the required storage capacity?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.03	Does the system meet a minimum of 70% of the required storage capacity?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.04	Does the system meet a minimum of 60% of the required storage capacity?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.05	Does the system meet less than 60% of the required storage capacity?	☐ Yes ☑ No ☐ NA ☐ Unknown
3	**Has there been any recent modifications to the water system?**	☑ Yes ☐ No ☐ NA ☐ Unknown
	Notes: A third well, the Far East Well, which dates back many years as an irrigation well for the former farm and orchard, was rehabilitated and put into drinking water system use without Division approval.	
3.01	DDW review of recent modifications:	☐ Yes ☑ No ☐ NA ☐ Unknown
	Notes: A third well, the Far East Well, which dates back many years as an irrigation well for the former farm and orchard, was rehabilitated and put into drinking water system use without Division	
3.02	Recent modifications - Briefly describe the project.	A third well, the Far East Well, which dates back many years as an irrigation well for the former farm and orchard,
4	Are there any undocumented water system facilities? (i.e. tanks, pump stations, treatment facilities, etc.)	☑ Yes ☐ No ☐ NA ☐ Unknown
	Notes: The one chlorination process in the water system, hypochlorite solution feed at the West Well, never received plan approval.	

Management / Emergency Response

1	**Does your system serve less than 3300 in population?**	☑ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
1.01	Does your system have a written Emergency Response Plan?	☐ Yes ☑ No ☐ NA ☐ Unknown
1.02	Has your Emergency Response Plan been updated within the last 3 years?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	**Does your system serve a population of 3300 or greater?**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Does your system have the EPA required Emergency Response Plan?	☐ Yes ☐ No ☐ NA ☐ Unknown
2.02	Has your Emergency Response Plan been updated within the last 3 years?	☐ Yes ☐ No ☐ NA ☐ Unknown

Management / Cross-Connections

1	Are there any unprotected connections between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system? Notes: All three drinking water wells have substandard connections to outdoor irrigation systems.	☑ Yes ☐ No ☐ NA ☐ Unknown
2	**Does the water system have all 5 of the following elements of a written cross-connection control program ?**	
2.01	Legally adopted authority statement?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.02	Documentation of annual public awareness and/or employee training?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.03	Documentation of personnel trained to manage the program? Notes: Operator Jim Hone gained backflow awareness experience in the hospital industry.	☑ Yes ☐ No ☐ NA ☐ Unknown
2.04	Records of hazards found, protection required and installed, enforcement actions, assembly testing etc.?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.05	Documentation of on-going program enforcement? (ie records of periodic hazard assessments, annual test report, updated assembly inventory, etc)	☐ Yes ☑ No ☐ NA ☐ Unknown

Management / Staffing

1 Is the main operator properly certified at the level required for the system?
☐ Yes ☑ No ☐ NA ☐ Unknown

Potential Deficiency

Notes: Nontransient noncommunity water system operators must be certified. The present water system operator, Jim Hone, is not certified.

2 Is a certified operator available within 1 hour travel time at all times as required by R309-300 (Operator Certification Rule)?
☐ Yes ☐ No ☐ NA ☑ Unknown

Management / Source Protection

1 Who is the designated person for the water system on records filed with the DDW?
Jim Hone

2 **Is their phone number and address different from the water system?**
☐ Yes ☑ No ☐ NA ☐ Unknown

2.01 Updated address.

2.02 Updated phone number.

3 Is there a current copy of each of the DWSP Plans on the premises of the water system? (If this is a transient non-community, they should have a copy of their assessment on the premises.)
☐ Yes ☑ No ☐ NA ☐ Unknown

Notes: In fact, the unapproved third well, the Far East Well, has no Division-recorded DWSP Plan. The two older wells, west Well and East Well, have DWSP Plans on file at DDW but not at the facility itself.

4 **Are the following items in the Source Protection Plans kept up to date in order to show current conditions in the DWSP zones, including:**

4.01 Is the inventory of potential contamination sources current?
☐ Yes ☐ No ☐ NA ☑ Unknown

4.02 Implementation of land management strategies in the recordkeeping section? The recordkeeping section must include copies of ordinances, codes, permits, public education programs, minutes of meetings, etc.
☐ Yes ☐ No ☐ NA ☑ Unknown

5 Are there any new sources for which a Preliminary Evaluation Report has not been submitted?
☑ Yes ☐ No ☐ NA ☐ Unknown

Notes: Far East Well.

Question Number		
6	Are there any old sources that have come into use for which a DWSP Plan has not been submitted? Notes: The third well, the Far East Well. A 10/24/04 construction and DWSP Plan exception was granted.	☑ Yes ☐ No ☐ NA ☐ Unknown
7	Has there been reconstruction or redevelopment of any ground-water source for which a revised DWSP Plan has not been submitted? Notes: The third well, the Far East Well. A 10/24/04 construction and DWSP Plan exception was granted.	☑ Yes ☐ No ☐ NA ☐ Unknown

Sources / General

General:

1 Potential Deficiency	Are there any undocumented source(s) physically connected to the drinking water system? Notes: The third well, the Far East Well.	☑ Yes ☐ No ☐ NA ☐ Unknown

Sources / Groundwater

EAST WELL - (Active) / Construction:

1	**The well casing does NOT extend a minimum of 18 inches above the finished ground surface or 12 inches above the well house floor? (Answer "No" if standard is met)** Notes: A 10/24/04 construction and DWSP Plan exception was granted.	☑ Yes ☐ No ☐ NA ☐ Unknown
1.01	Is the well site in a flood plain or area likely to be flooded?	☐ Yes ☐ No ☐ NA ☑ Unknown
2 Potential Deficiency	Is the sanitary seal properly installed and maintained? Notes: No evidence of a sanitary seal.	☐ Yes ☑ No ☐ NA ☐ Unknown
3	**Is there a pitless adapter?**	☐ Yes ☑ No ☐ NA ☐ Unknown
3.01	Does the pitless adapter appear to be water tight including the cap, cover, casing extension and other attachments?	☐ Yes ☐ No ☐ NA ☐ Unknown
4	**Is the well casing vented?**	☐ Yes ☑ No ☐ NA ☐ Unknown
4.01	Is the open end of the vent screened with a #14 mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.02	Is the open end of the vent down-turned?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.03	Is the open end of the vent terminated with an appropriate air gap above the ground?	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
5	**Is there a pump to waste line from the well?**	☐ Yes ☑ No ☐ NA ☐ Unknown
5.01	Does the pump to waste line discharge through an approved air gap?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.02	Is the pump to waste line equipped with a #4 non-corrodible mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.03	Does the pump to waste line discharge to a sanitary sewer or storm sewer without proper local authorization?	☐ Yes ☐ No ☐ NA ☐ Unknown
6	Is there a means to measure drawdown?	☐ Yes ☑ No ☐ NA ☐ Unknown
7	Is the wellhead properly secured against unauthorized personnel?	☐ Yes ☑ No ☐ NA ☐ Unknown

Sources / Groundwater

EAST WELL - (Active) / Pumps:

1	Where does this pumping station pump from and to?	East well's submersible pump pumps to east House.
2	What type of pump(s) are at this pumping station?	☐ CF - Centrifugal ☐ HP - Hand Pump ☐ JT - Jet ☐ PD - Positive Displacement ☐ SC - Screw ☑ SU - Submersible ☐ VT - Vertical Turbine
3	Is the building and equipment protected from flooding?	☐ Yes ☐ No ☑ NA ☐ Unknown
	Notes: There is no building.	
4	What is the actual pumping capacity of this well in gallons per minute (GPM)?	0
	Notes: Unknown. There is no flowmeter at the wellhead.	
5	Are cross-connections present in the well discharge piping?	☑ Yes ☐ No ☐ NA ☐ Unknown
Potential Deficiency	Notes: Substanderd connection to nearby outdoor irrigation.	
6	Is adequate drainage provided?	☐ Yes ☑ No ☐ NA ☐ Unknown
Potential Deficiency 1	Notes: Ground around casing is level but ponding could occur.	
7	Are toxic chemicals, hazardous or flammable materials or lubricants stored inside the pumping station?	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
8	**Is the pump discharge line equipped with and in order of placement:**	
8.01	Pump discharge piping: a smooth-nosed sampling tap?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.02 **Potential Deficiency**	Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.03 **Potential Deficiency**	Pump discharge piping: pressure gauge?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.04 **Potential Deficiency**	Pump discharge piping: flow meter?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.05 **Potential Deficiency**	Pump discharge piping: isolation gate valves?	☐ Yes ☑ No ☐ NA ☐ Unknown
9 **Potential Deficiency**	**Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?**	☐ Yes ☑ No ☐ NA ☐ Unknown
9.01	Is the discharge line from the air release valve properly downturned?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.02	Is the open end of the air release valve screened with #14 mesh corrosion resistant mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.03	Is the open end of the air release valve terminated an appropriate air gap (minimum of 6 inches) above the ground or pumphouse floor?	☐ Yes ☐ No ☐ NA ☐ Unknown
10	Are the correct types of lubricant used (ANSI/NSF 60)?	☐ Yes ☐ No ☑ NA ☐ Unknown
11	Is rotating and electrical equipment provided with protective guards?	☐ Yes ☐ No ☐ NA ☑ Unknown

Sources / Groundwater

WEST WELL - (Active) / Construction:

1	**The well casing does NOT extend a minimum of 18 inches above the finished ground surface or 12 inches above the well house floor? (Answer "No" if standard is met)**	☑ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
1.01	Is the well site in a flood plain or area likely to be flooded?	☑ Yes ☐ No ☐ NA ☐ Unknown
2	Is the sanitary seal properly installed and maintained?	☐ Yes ☑ No ☐ NA ☐ Unknown
Potential Deficiency		
3	**Is there a pitless adapter?**	☐ Yes ☑ No ☐ NA ☐ Unknown
3.01	Does the pitless adapter appear to be water tight including the cap, cover, casing extension and other attachments?	☐ Yes ☐ No ☐ NA ☐ Unknown
4	**Is the well casing vented?**	☐ Yes ☑ No ☐ NA ☐ Unknown
4.01	Is the open end of the vent screened with a #14 mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.02	Is the open end of the vent down-turned?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.03	Is the open end of the vent terminated with an appropriate air gap above the ground?	☐ Yes ☐ No ☐ NA ☐ Unknown
5	**Is there a pump to waste line from the well?**	☐ Yes ☑ No ☐ NA ☐ Unknown
5.01	Does the pump to waste line discharge through an approved air gap?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.02	Is the pump to waste line equipped with a #4 non-corrodible mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.03	Does the pump to waste line discharge to a sanitary sewer or storm sewer without proper local authorization?	☐ Yes ☐ No ☐ NA ☐ Unknown
6	Is there a means to measure drawdown?	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
7	Is the wellhead properly secured against unauthorized personnel?	☐ Yes ☑ No ☐ NA ☐ Unknown

Sources / Groundwater

WEST WELL - (Active) / Pumps:

1	Where does this pumping station pump from and to?	West Well's submersible pump pumps to West House.
2	What type of pump(s) are at this pumping station?	☐ CF - Centrifugal ☐ HP - Hand Pump ☐ JT - Jet ☐ PD - Positive Displacement ☐ SC - Screw ☑ SU - Submersible ☐ VT - Vertical Turbine
3	Is the building and equipment protected from flooding?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	What is the actual pumping capacity of this well in gallons per minute (GPM)? Notes: Unknown. There is no flowmeter at the wellhead.	0
5 Potential Deficiency	Are cross-connections present in the well discharge piping? Notes: All three wells have substandard connections to irrigation systems.	☑ Yes ☐ No ☐ NA ☐ Unknown
6 Potential Deficiency	Is adequate drainage provided? Notes: Ground is level near wellhead but ponding is possible.	☐ Yes ☑ No ☐ NA ☐ Unknown
7	Are toxic chemicals, hazardous or flammable materials or lubricants stored inside the pumping station? Notes: There is no pumping station.	☐ Yes ☐ No ☑ NA ☐ Unknown
8	**Is the pump discharge line equipped with and in order of placement:**	
8.01	Pump discharge piping: a smooth-nosed sampling tap?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.02 Potential Deficiency	Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.03 Potential Deficiency	Pump discharge piping: pressure gauge?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.04 Potential Deficiency	Pump discharge piping: flow meter?	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
8.05 Potential Deficiency	Pump discharge piping: isolation gate valves?	☐ Yes ☑ No ☐ NA ☐ Unknown
9 Potential Deficiency	**Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?**	☐ Yes ☑ No ☐ NA ☐ Unknown
9.01	Is the discharge line from the air release valve properly downturned?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.02	Is the open end of the air release valve screened with #14 mesh corrosion resistant mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.03	Is the open end of the air release valve terminated an appropriate air gap (minimum of 6 inches) above the ground or pumphouse floor?	☐ Yes ☐ No ☐ NA ☐ Unknown
10	Are the correct types of lubricant used (ANSI/NSF 60)?	☐ Yes ☐ No ☐ NA ☑ Unknown
11	Is rotating and electrical equipment provided with protective guards?	☐ Yes ☐ No ☑ NA ☐ Unknown

Sources / Groundwater

FAR EAST WELL - (Active) / Construction:

1	**The well casing does NOT extend a minimum of 18 inches above the finished ground surface or 12 inches above the well house floor? (Answer "No" if standard is met)**	☑ Yes ☐ No ☐ NA ☐ Unknown
1.01	Is the well site in a flood plain or area likely to be flooded?	☑ Yes ☐ No ☐ NA ☐ Unknown
2 Potential Deficiency	Is the sanitary seal properly installed and maintained?	☐ Yes ☑ No ☐ NA ☐ Unknown
3	**Is there a pitless adapter?**	☐ Yes ☑ No ☐ NA ☐ Unknown
3.01	Does the pitless adapter appear to be water tight including the cap, cover, casing extension and other attachments?	☐ Yes ☐ No ☐ NA ☐ Unknown
4	**Is the well casing vented?**	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
4.01	Is the open end of the vent screened with a #14 mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.02	Is the open end of the vent down-turned?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.03	Is the open end of the vent terminated with an appropriate air gap above the ground?	☐ Yes ☐ No ☐ NA ☐ Unknown
5	**Is there a pump to waste line from the well?**	☐ Yes ☑ No ☐ NA ☐ Unknown
5.01	Does the pump to waste line discharge through an approved air gap?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.02	Is the pump to waste line equipped with a #4 non-corrodible mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.03	Does the pump to waste line discharge to a sanitary sewer or storm sewer without proper local authorization?	☐ Yes ☐ No ☐ NA ☐ Unknown
6	Is there a means to measure drawdown?	☐ Yes ☑ No ☐ NA ☐ Unknown
7	Is the wellhead properly secured against unauthorized personnel?	☐ Yes ☑ No ☐ NA ☐ Unknown

Sources / Groundwater

FAR EAST WELL - (Active) / Pumps:

1 Where does this pumping station pump from and to?

The Far East well's submersible pump pumps to the far East House.

2 What type of pump(s) are at this pumping station?

☐ CF - Centrifugal ☐ HP - Hand Pump ☐ JT - Jet ☐ PD - Positive Displacement ☐ SC - Screw ☑ SU - Submersible ☐ VT - Vertical Turbine

3 Is the building and equipment protected from flooding?

☐ Yes ☐ No ☑ NA ☐ Unknown

Notes: There is no building.

4 What is the actual pumping capacity of this well in gallons per minute (GPM)?

0

Notes: Unknown. There is no flowmeter at the wellhead.

Question Number		
5 Potential Deficiency	Are cross-connections present in the well discharge piping? Notes: All three wells have substanderd connections to irrigation systems.	☑ Yes ☐ No ☐ NA ☐ Unknown
6 Potential Deficiency	Is adequate drainage provided?	☐ Yes ☑ No ☐ NA ☐ Unknown
7	Are toxic chemicals, hazardous or flammable materials or lubricants stored inside the pumping station?	☐ Yes ☐ No ☑ NA ☐ Unknown
8	**Is the pump discharge line equipped with and in order of placement:**	
8.01	Pump discharge piping: a smooth-nosed sampling tap?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.02 Potential Deficiency	Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.03 Potential Deficiency	Pump discharge piping: pressure gauge?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.04 Potential Deficiency	Pump discharge piping: flow meter?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.05 Potential Deficiency	Pump discharge piping: isolation gate valves?	☐ Yes ☑ No ☐ NA ☐ Unknown
9 Potential Deficiency	**Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?**	☐ Yes ☑ No ☐ NA ☐ Unknown
9.01	Is the discharge line from the air release valve properly downturned?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.02	Is the open end of the air release valve screened with #14 mesh corrosion resistant mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.03	Is the open end of the air release valve terminated an appropriate air gap (minimum of 6 inches) above the ground or pumphouse floor?	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
10	Are the correct types of lubricant used (ANSI/NSF 60)?	☐ Yes ☐ No ☑ NA ☐ Unknown
11	Is rotating and electrical equipment provided with protective guards?	☐ Yes ☐ No ☑ NA ☐ Unknown

EAST WELL - (Active) / General

General:

1	Is a schematic of the treatment facility readily available and up to date?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	Is a finished water sampling tap provided?	☐ Yes ☐ No ☑ NA ☐ Unknown
3	Is the facility performing adequate process control testing consistent with the specific treatment process?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	**Is there any recycling being performed from waste stream?**	☐ Yes ☐ No ☑ NA ☐ Unknown
4.01	If yes, where does the recycle water enter the treatment plant?	_____ _____
5	For all surface water plants that serve a population greater than 3300, do they have equipment to measure chlorine residuals continuously entering the distribution system?	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Are pre- and post-chlorination systems, for all facilities treating surface water, independent to prevent possible siphoning of raw or partially treated water into the clear well?	☐ Yes ☐ No ☑ NA ☐ Unknown

EAST WELL - (Active) / General

Lab/Monitoring:

1	Are laboratory facilities or appropriate test kits available at the plant to enable staff to perform appropriate process control testing?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	Do all chemical reagents have an unexpired shelf life?	☐ Yes ☐ No ☑ NA ☐ Unknown

EAST WELL - (Active) / General

Chemical Use:

1	**Are dry chemicals used?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Does the dry chemical feeder measure the quantity of chemical fed volumetrically or gravimetrically?	☐ volumetrically ☐ gravimetrically
1.02	Are provisions made for the proper transfer of dry chemicals from shipping containers to storage bins or hoppers, in such a way as to minimize the quantity of dust which may enter the room in which the equipment is installed?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Are provisions made for disposing of empty bags, drums or barrels by a procedure which will minimize exposure to dusts?	☐ Yes ☐ No ☐ NA ☐ Unknown
2	**Are liquid chemicals used?**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Is cross-connection control provided on the service water lines that feed the solution tanks?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.02	Do overflow pipes, when provided, have free fall discharge?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.03	Are subsurface locations for solution tanks free from sources of possible contamination?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.04	Do subsurface locations for solution tanks have positive drainage for groundwater, accumulated water, chemical spills and overflows?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.05	If a motor-driven transfer pump is provided, is a liquid level limit switch and an over-flow from the day tank operable?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.06	Are there adequate spill containment provisions?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.07	Are acid storage and day tanks provided with separate screened vents?	☐ Yes ☐ No ☑ NA ☐ Unknown

Question Number		
2.08	Is a means provided to measure the solution level in the day tank or storage tank?	☐ Yes ☐ No ☑ NA ☐ Unknown
3	Are chemical feeders and pumps operated at no lower than 20 percent of the feed range?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	Is an anti-siphon device provided so that liquid chemical solutions cannot be siphoned after the solution feeders into the water supply?	☐ Yes ☐ No ☑ NA ☐ Unknown
5	Are tanks and tank refilling line entry points properly labeled to designate the correct chemical ?	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Are chemicals stored in covered or unopened shipping containers? (unless the chemical is transferred into an approved storage unit)	☐ Yes ☐ No ☑ NA ☐ Unknown
7	Is cross-connection control provided so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank?	☐ Yes ☐ No ☑ NA ☐ Unknown
8	Is all chemical feed equipment operable and in good condition?	☐ Yes ☐ No ☑ NA ☐ Unknown
9	Are spare parts available for all chemical feeders?	☐ Yes ☐ No ☑ NA ☐ Unknown
10	Are the chemical feeders flow paced?	☐ Yes ☐ No ☑ NA ☐ Unknown
11	Is there proper anti-siphon protection on each feed pump?	☐ Yes ☐ No ☑ NA ☐ Unknown
12	Are feed lines protected against freezing?	☐ Yes ☐ No ☑ NA ☐ Unknown
13	Are feed lines made of durable, corrosion-resistant material?	☐ Yes ☐ No ☑ NA ☐ Unknown
14	Are all chemicals conducted from the feeder to the point of application in separate conduits?	☐ Yes ☐ No ☑ NA ☐ Unknown

Question Number		
15	Are incompatible chemicals stored separately?	☐ Yes ☐ No ☑ NA ☐ Unknown
16	Do daily operating records reflect chemical dosages and total quantities used?	☐ Yes ☐ No ☑ NA ☐ Unknown
17	Are all chemical feeders properly calibrated to ensure accurate feed rates?	☐ Yes ☐ No ☑ NA ☐ Unknown
18	Are provisions made for measuring the quantities of chemicals used?	☐ Yes ☐ No ☑ NA ☐ Unknown
19	Are acids and caustics kept in closed corrosion-resistant shipping containers or storage units?	☐ Yes ☐ No ☑ NA ☐ Unknown
20	Are vents from feeders, storage facilities and equipment exhaust discharged to the outside atmosphere above grade and remote from air intakes?	☐ Yes ☐ No ☑ NA ☐ Unknown
21	Are all chemicals and water contact materials approved by an ANSI/NSF accredited organization? Notes: Label missing from sodium hypochlorite solution container.	☐ Yes ☐ No ☑ NA ☐ Unknown

EAST WELL - (Active) / General

Waste Disposal:

1	Are process and plant wastes discharged to anything? If yes explain.	☐ Yes ☐ No ☑ NA ☐ Unknown

ST WELL - (Active) / Filtration

General:

1	Are the filters operated to minimize flow variations?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	Are instrumentation and controls for the process operational, and in service?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	Is a sample tap provided prior to application of permanganate?	☐ Yes ☐ No ☑ NA ☐ Unknown
5	Is a sample tap provided at the filter effluent?	☐ Yes ☐ No ☑ NA ☐ Unknown

Question Number		
6	Is settled backwash water recycled?	☐ Yes ☐ No ☑ NA ☐ Unknown
10	Are media depths periodically checked against design standards?	☐ Yes ☐ No ☑ NA ☐ Unknown
13	Are filter run times consistent throughout the year?	☐ Yes ☐ No ☑ NA ☐ Unknown
15	Is there an SOP for the backwash procedure?	☐ Yes ☐ No ☑ NA ☐ Unknown
17	Are the filters equipped with a surface wash or air scour system to enhance the efficiency of the backwash process?	☐ Yes ☐ No ☑ NA ☐ Unknown
18	Is filter-to-waste practiced at the end of a backwash?	☐ Yes ☐ No ☑ NA ☐ Unknown

EAST WELL - (Active) / Filtration

Cartridge:

1	Is pretreatment used to prevent rapid fouling?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	What filter element is used in the cartridge?	☐ ceramic ☐ polypropylene ☑ other
3	What is the filter pore size?	Unknown
4	How frequently are the filters cleaned per year?	0
	Notes: Cartridges are disposable. Cartridges cannot be cleaned and reused.	
5	What is the typical time between filter replacements?	Three months.
6	Is disinfection being used to prevent fouling and reduce microbial pass-through?	☐ Yes ☑ No ☐ NA ☐ Unknown

Potential Deficiency

Question Number

WEST WELL - (Active) / General

General:

1	Is a schematic of the treatment facility readily available and up to date?	☐ Yes ☐ No ☐ NA ☑ Unknown
2	Is a finished water sampling tap provided?	☐ Yes ☐ No ☑ NA ☐ Unknown
3	Is the facility performing adequate process control testing consistent with the specific treatment process?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	**Is there any recycling being performed from waste stream?**	☐ Yes ☑ No ☐ NA ☐ Unknown
4.01	If yes, where does the recycle water enter the treatment plant?	_____ _____
5	For all surface water plants that serve a population greater than 3300, do they have equipment to measure chlorine residuals continuously entering the distribution system?	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Are pre- and post-chlorination systems, for all facilities treating surface water, independent to prevent possible siphoning of raw or partially treated water into the clear well?	☐ Yes ☐ No ☑ NA ☐ Unknown

WEST WELL - (Active) / General

Lab/Monitoring:

1	Are laboratory facilities or appropriate test kits available at the plant to enable staff to perform appropriate process control testing?	☐ Yes ☐ No ☐ NA ☑ Unknown
2	Do all chemical reagents have an unexpired shelf life?	☑ Yes ☐ No ☐ NA ☐ Unknown

WEST WELL - (Active) / General

Chemical Use:

1	**Are dry chemicals used?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Does the dry chemical feeder measure the quantity of chemical fed volumetrically or gravimetrically?	☐ volumetrically ☐ gravimetrically

Question Number		
1.02	Are provisions made for the proper transfer of dry chemicals from shipping containers to storage bins or hoppers, in such a way as to minimize the quantity of dust which may enter the room in which the equipment is installed?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Are provisions made for disposing of empty bags, drums or barrels by a procedure which will minimize exposure to dusts?	☐ Yes ☐ No ☐ NA ☐ Unknown
2	**Are liquid chemicals used?**	☑ Yes ☐ No ☐ NA ☐ Unknown
2.01	Is cross-connection control provided on the service water lines that feed the solution tanks?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.02	Do overflow pipes, when provided, have free fall discharge?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.03	Are subsurface locations for solution tanks free from sources of possible contamination?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.04	Do subsurface locations for solution tanks have positive drainage for groundwater, accumulated water, chemical spills and overflows?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.05	If a motor-driven transfer pump is provided, is a liquid level limit switch and an over-flow from the day tank operable?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.06	Are there adequate spill containment provisions? Notes: Floor drain could easily contain a leak or spill from the 5-gallon sodium hypochlorite carboy.	☐ Yes ☐ No ☑ NA ☐ Unknown
2.07	Are acid storage and day tanks provided with separate screened vents?	☐ Yes ☐ No ☑ NA ☐ Unknown
2.08	Is a means provided to measure the solution level in the day tank or storage tank? Notes: Operator can see the level of sodium hypochlorite remaining in the 5-gallon carboy.	☐ Yes ☐ No ☑ NA ☐ Unknown
3	Are chemical feeders and pumps operated at no lower than 20 percent of the feed range? Notes: Old diaphragm feed pump should be replaced.	☑ Yes ☐ No ☐ NA ☐ Unknown
4	Is an anti-siphon device provided so that liquid chemical solutions cannot be siphoned after the solution feeders into the water supply?	☐ Yes ☐ No ☑ NA ☐ Unknown

Question Number		
5	Are tanks and tank refilling line entry points properly labeled to designate the correct chemical ? Notes: The one feed line is transparently obvious and requires no labeling.	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Are chemicals stored in covered or unopened shipping containers? (unless the chemical is transferred into an approved storage unit) Notes: A single, 5-gallon carboy of concentrated sodium hypochlorite solution supplies the suction side of the diaphragm feed pump.	☑ Yes ☐ No ☐ NA ☐ Unknown
7	Is cross-connection control provided so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank?	☐ Yes ☐ No ☑ NA ☐ Unknown
8	Is all chemical feed equipment operable and in good condition? Notes: New hypochlorite solution diaphragm feed pump is recommended.	☐ Yes ☐ No ☐ NA ☑ Unknown
9	Are spare parts available for all chemical feeders?	☐ Yes ☐ No ☐ NA ☑ Unknown
10	Are the chemical feeders flow paced? Notes: Hypochlorite solution feed pump turns on when the constant rate well pump turns on. The trick is to properly match feed rate to well flow.	☑ Yes ☐ No ☐ NA ☐ Unknown
11	Is there proper anti-siphon protection on each feed pump?	☐ Yes ☐ No ☑ NA ☐ Unknown
12	Are feed lines protected against freezing?	☐ Yes ☐ No ☑ NA ☐ Unknown
13	Are feed lines made of durable, corrosion-resistant material?	☑ Yes ☐ No ☐ NA ☐ Unknown
14	Are all chemicals conducted from the feeder to the point of application in separate conduits? Notes: There is only one chemical, sodium hypochlorite.	☐ Yes ☐ No ☑ NA ☐ Unknown
15	Are incompatible chemicals stored separately?	☐ Yes ☐ No ☑ NA ☐ Unknown
16	Do daily operating records reflect chemical dosages and total quantities used? Notes: The operator observes but does not record drawdown of each sodium hypochlorite, 5-gallon carboy. A new carboy is moved in place when the old one is depleted.	☐ Yes ☐ No ☐ NA ☑ Unknown
17	Are all chemical feeders properly calibrated to ensure accurate feed rates?	☐ Yes ☐ No ☐ NA ☑ Unknown

Question Number		
18	Are provisions made for measuring the quantities of chemicals used? Notes: The operator observes but does not record drawdown of each sodium hypochlorite, 5-gallon carboy. A new carboy is moved in place when the old one is depleted.	☐ Yes ☐ No ☐ NA ☑ Unknown
19	Are acids and caustics kept in closed corrosion-resistant shipping containers or storage units?	☐ Yes ☐ No ☑ NA ☐ Unknown
20	Are vents from feeders, storage facilities and equipment exhaust discharged to the outside atmosphere above grade and remote from air intakes?	☐ Yes ☐ No ☑ NA ☐ Unknown
21	Are all chemicals and water contact materials approved by an ANSI/NSF accredited organization? Notes: NSF-certified sodium hypochorite soltion is used.	☑ Yes ☐ No ☐ NA ☐ Unknown

WEST WELL - (Active) / General

Waste Disposal:

1	Are process and plant wastes discharged to anything? If yes explain.	☐ Yes ☐ No ☑ NA ☐ Unknown

WEST WELL - (Active) / Chlorination

General:

1	During the past year, has the disinfection process operated uninterrupted while water was being produced? If no, describe in comments.	☐ Yes ☐ No ☐ NA ☑ Unknown
2	Is the contact time between the point of disinfection and the first customer in compliance with regulatory requirements? Notes: Chlorinated drinking water passes through two hydropneumatic tanks in series before reaching the house faucets. The detention time through the two hydropneumatic tanks is unknown.	☐ Yes ☐ No ☐ NA ☑ Unknown
3	Are spare parts available to replace parts subject to wear and breakage?	☐ Yes ☐ No ☐ NA ☑ Unknown
4	Is there a means to measure the volume of water treated? Notes: None of the three wells has a flowmeter.	☐ Yes ☑ No ☐ NA ☐ Unknown
5	What disinfectant residual is maintained at the entry point of the distribution system? Notes: Operator needs to buy a chlorine residual test kit for the West Well disinfection process.	Unknown
6	Is at least a trace of residual maintained at all points in the distribution system?	☐ Yes ☐ No ☐ NA ☑ Unknown
7	Are chlorine residuals tested at least three times a week in the distribution system?	☐ Yes ☐ No ☐ NA ☑ Unknown

Question Number		
8	Are there an adequate number of disinfection residual sample sites and do they provide a representative sample of system conditions? Notes: Operator has no sampling site map.	☐ Yes ☑ No ☐ NA ☐ Unknown
9	Is chlorine residual testing equipment capable of measuring residuals to the nearest 0.1 milligrams per liter?	☐ Yes ☐ No ☐ NA ☑ Unknown
10	Is the correct reagent used for testing free residual?	☐ Yes ☐ No ☐ NA ☑ Unknown

WEST WELL - (Active) / Chlorination

Hypochlorination:

1	Are hypochlorite feeders of the positive displacement type? Notes: The hypochorite feed pump is a diaphragm pump. This is not a deficiency!	☐ Yes ☑ No ☐ NA ☐ Unknown
2	Is cross-connection control provided on the service water lines that feed the solution tanks?	☐ Yes ☐ No ☑ NA ☐ Unknown
3	Is each tank provided with a valved drain, protected against backflow?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	Are overflow pipes, when provided, located where they can be readily monitored?	☐ Yes ☐ No ☑ NA ☐ Unknown
5	Are storage and day tanks provided with separate vents that terminate to the outside atmosphere?	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Is there a procedure in place to ensure consistent strength of the chemical in the day tank?	☐ Yes ☐ No ☑ NA ☐ Unknown
7	Are storage tanks and pipelines for liquid chemicals specified for use with individual chemicals and not used for different chemicals?	☑ Yes ☐ No ☐ NA ☐ Unknown
8	Is the storage tank covered to minimize corrosive vapors?	☑ Yes ☐ No ☐ NA ☐ Unknown

WEST WELL - (Active) / Filtration

Cartridge:

1	Is pretreatment used to prevent rapid fouling? Notes: West Well water is chlorinated before it passes through the filter cartridges.	☑ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
2	What filter element is used in the cartridge?	☐ ceramic ☐ polypropylene ☑ other
3	What is the filter pore size?	Unknown.
4	How frequently are the filters cleaned per year?	0
	Notes: Dirty cartridges cannot be cleaned and reused. Dirty cartridges are thrown away.	
5	What is the typical time between filter replacements?	Three months.
6	Is disinfection being used to prevent fouling and reduce microbial pass-through?	☑ Yes ☐ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Design

1 Potential Deficiency	Do all water mains (installed after 1995) that provide fire flow have a diameter of at least 8 inches?	☐ Yes ☑ No ☐ NA ☐ Unknown
2	**Was asbestos/cement pipe used in the system?**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.1	Has an asbestos analysis been done?	☐ Yes ☐ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Pressure/Flow

1	Is the PWS capable of providing sufficient water during maximum hourly demand conditions to maintain a minimum pressure of 20 psi within the system measured at all points of connections during normal system operation?	☑ Yes ☐ No ☐ NA ☐ Unknown
2	**Was the system constructed after March 1, 2006.**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Does the system maintain at all points of connection the following pressures: (a) 20 psi during conditions of fire flow and fire demand experienced during peak day demand; (b) 30 psi during peak instantaneous demand; and (c) 40 psi during peak day demand.	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number

DISTRIBUTION SYSTEM - (Active) / Air & Vacuum Release Valves

1	**Are air and vacuum release valves used in the system?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Is the vent line properly screened (#14 mesh) and down turned?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.02	Does the discharge piping on all air relief valves extend a proper distance above ground and flood level?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Does the valve chamber have a drain or adequate sump?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.04	Does the valve chamber show evidence of flooding?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.05	Is the chamber flooded at the time of the inspection?	☐ Yes ☐ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Cross-Connections

1	**Does any portion of the distribution system cross under any surface water body?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Were all the following precautions taken? A min. of 2 ft of cover over the pipe; and if the crossing is greater than 15 ft: special construction with restrained joints; valves at each side for pipeline isolation; and permanent taps to allow leakage testing.	☐ Yes ☐ No ☐ NA ☐ Unknown
3 **Potential Deficiency**	Does the water system have a program to control the use of fire hydrants?	☐ Yes ☑ No ☐ NA ☐ Unknown
4	Are blow offs connected to sanitary or storm sewers or do they exit below flood level in ditches or streams?	☐ Yes ☐ No ☑ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Disinfection

1 **Potential Deficiency**	Does your water facility disinfection procedures meet the AWWA C-601, 602, 651, 652 Standards for disinfection?	☐ Yes ☑ No ☐ NA ☐ Unknown

POD New Haven Spanish Fork System #25159

Name	WR/CH/EX #	Type	Status	App #	Cert #
LAMC L.L.C., Underground Water Well Priority Date: 05/22/1961	51-2872 0.015 cfs	APPL	CERT	A23132	a725
LAMC L.L.C., Underground Water Well Priority Date: 06/17/1977	51-4729 0.015 cfs	APPL	CERT	A49654	10313
LAMC L.L.C., Underground Water Well Priority Date: 05/27/1961	51-2967 0.030 cfs	APPL	CERT	A33199e	9116
LAMC LLC, Underground Water Well Priority Date: 12/03/1979	51-4917 0.015 cfs 1.5 acft	APPL	CERT	A54022	
LAMC, LLC, Underground Water Well Priority Date: 02/12/1997	54-683 0.015 cfs 1.4 acft	APPL	CERT	A66596	
LAMC, LLC, Underground Water Well Priority Date: 02/03/2000	54-711 1.6 acft	APPL	CERT	A67157	

WATER RIGHT: 51-8186 APPLICATION/CLAIM NO.: A34096 CERT. NO.: 7312

OWNERSHIP

NAME: Devid C. Helm
ADDR: 5300 South 900 East
Salt Lake City, Utah 84117

DATES, ETC.

LAND OWNED BY APPLICANT?
FILED: 02/21/1962|PRIORITY: 02/21/1962|PUB BEGAN: |PUB ENDED:
|NEWSPAPER:
ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF: [ ]|ELEC/PROOF: |CERT/WUC: 06/20/1966|LAP, ETC:
|PROV LETTER:
RENOVATE: |RECON REQ: |TYPE: [ ]
PD Book No. Map:
Type of Right: Application to Appropriate Source of Info: Ownership Segregation
Status: Certificate

LOCATION OF WATER RIGHT (Points of Diversion: Click on Location to access PLAT Program.)

FLOW: 1.5 acre-feet SOURCE: Underground Water Well
COUNTY: Utah COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)
(1) S 756 ft E 527 ft from N4 cor, Sec 28, T 8S, R 3E, SLBM

This is apparently the Orchard Well.

NAD83					
Lat	40°	05'	55.57414"	40.09877059°	Spanish Fork Peak
Long	111°	36'	18.79216"	111.60522°	
NAD27					
Lat	40°	05'	55.734"	40.09882°	Spanish Fork Peak
Long	111°	36'	16.083"	111.60447°	

DIAMETER OF WELL: 12 ins. DEPTH: 471 to ft. YEAR DRILLED: WELL LOG? NO WELL ID#: Comment:

USES OF WATER RIGHT

SUPPLEMENTAL GROUP NO. 227839. Water Rights Appurtenant to the following use(s):
51-69,1603,8181,8182,8183, 8184,8185,8186

###IRRIGATION: 0.375 acres of the Group Total: 39.4 acres Diversion Limit: 0.0 acft.
PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				Section
SOUTH WEST QUARTER				SOUTH EAST QUARTER				Totals	
	NW	NE	SW	SE	NW	NE	SW	SE	NW
NE	SW	SE	NW	NE	SW	SE			
Sec 21 T 8S R 3E SLBM									
		15.0000		15.0000					
Sec 28 T 8S R 3E SLBM									
				24.4000					
				24.4000					

SEGREGATION HISTORY

This Right was Segregated from 51-1603 , with Appl#: A34096, Approval Date: / / under which Proof is to be submitted. This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES					
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAM - PER)	MUNICIPAL	MINING	POWER	OTHER
1.5	0.3750							

END OF DATA

WATER RIGHT: 51-2873 APPLICATION/CLAIM NO.: A23132 CERT. NO.: a725
CHANGE&: a5797 Certificate 9725

OWNERSHIP**********

NAME: LAMC L.L.C.
ADDR: P.O. Box 50238
Provo, Utah 84605-0238

DATES, ETC.**********

LAND OWNED BY APPLICANT?
FILED: 05/22/1961|PRIORITY: 05/22/1961|PUB BEGAN: |PUB ENDED:
|NEWSPAPER:
ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: 08/30/1972|LAP, ETC:
|PROV LETTER:
RENOVATE: |RECON REQ: |TYPE: [ ]
PD Book No. Map:
Type of Right: Application to Appropriate Source of Info: Certificate Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*******

FLOW: 0.015 cfs SOURCE: Underground Water Well
COUNTY: Utah COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)
(1) S 1124 ft W 1495 ft from NE cor, Sec 28, T 8S, R 3E, SLBM

This is apparently the Stinky Well.

NAD83
Lat 40° 05' 52.00721" 40.09777978° Spanish Fork Peak
Long 111° 36' 10.63654" 111.60295466°

NAD27
Lat 40° 05' 52.167" 40.09782° Spanish Fork Peak
Long 111° 36' 7.928" 111.60220°

DIAMETER OF WELL: 6 ins. DEPTH: 267 to ft. YEAR DRILLED: 1970 WELL LOG? Yes WELL ID#: 427045
Comment:

USES OF WATER RIGHT**********

SUPPLEMENTAL GROUP NO. 229315.

###STOCKWATER: 2 Stock Units Diversion Limit:
PERIOD OF USE: 01/01 TO 12/31

###DOMESTIC: 1 Family Diversion Limit:
PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE: *-------NORTH WEST QUARTER------*-------NORTE EAST QUARTER------*-------
SOUTH WEST QUARTER------*-------SOUTH EAST QUARTER------* Section
* NW | NE | SW | SE * NW | NE | SW | SE * NW
| NE | SW | SE * NW | NE | SW | SE * Totals
Sec 28 T 8S R 3E SLBM *_____|_____|_____|_____*X
|_____|_____|_____*_____|_____|_____|_____*_____|_____|_____|_____*
0.0000

PLACE OF USE for STOCKWATERING**********

NORTH-WEST¼ NORTH-EAST¼ SOUTH-WEST¼ SOUTH-EAST¼
NW NE SW SE NW NE SW SE NW NE SW SE NW NE SW SE
Sec 28 T 8S R 3E SLBM * : : : * * X: : : * * : : : * * : : : *

SEGREGATION HISTORY**********

This Right was Segregated from 51-1536 , with Appl#: A23132, Approval Date: / / under
which Proof is to be submitted.
This Right as originally filed:

----------W A T E R U S E S----------
FLOW IN CFS | QUANTITY IN ACRE-FEET | IRRIGATED ACREAGE | STOCK (ELUs) | DOMESTIC (FAM-PER) | MUNICIPAL | MINING | POWER | OTHER
0.015 | | 0.1300

**********E N D O F D A T A**********

WATER RIGHT: 51-4917 APPLICATION/CLAIM NO.: A54022 CERT. NO.: CERTIFICATED

OWNERSHIP**********

NAME: LAMC LLC
ADDR: PO Box 50238
Provo UT 84605-1218

DATES, ETC.**********

LAND OWNED BY APPLICANT?
FILED: 12/03/1979|PRIORITY: 12/03/1979|PUB BEGAN: |PUB ENDED:
|NEWSPAPER:
ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate:04/03/1980|PROOF DUE: 11/30/1997
EXTENSION: |ELEC/PROOF:[Proof]|ELEC/PROOF:10/27/1997|CERT/WUC: 07/17/1998|LAP, ETC:
|PROV LETTER:
RENOVATE: |RECON REQ: |TYPE: [ ]
PD Book No. Map:
Type of Right: Application to Appropriate Source of Info: Certificate Status: Certificate

---

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*******

FLOW: 0.015 cfs OR 1.506 acre-feet SOURCE: Underground Water Well
COUNTY: Utah COMMON DESCRIPTION: 3 Mi SE from Spanish Fork

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)
(1) S 210 ft W 1647 ft from NE cor, Sec 28, T 8S, R 3E, SLBM

This is apparently the East Well.

NAD83					
Lat	40°	06'	1.03322"	40.10028701°	Spanish Fork Peak
Long	111°	36'	12.67365"	111.6035205°	
NAD27					
Lat	40°	06'	1.193"	40.10033°	Spanish Fork Peak
Long	111°	36'	9.965"	111.60277°	

DIAMETER OF WELL: 6 ins. DEPTH: 285 to ft. YEAR DRILLED: 1982 WELL LOG? Yes WELL ID#: 30137
Comment:

USES OF WATER RIGHT**********

SUPPLEMENTAL GROUP NO. 230821.

###IRRIGATION: 0.25 acres Diversion Limit: 1.0 acft.
PERIOD OF USE: 04/01 TO 10/31

###STOCKWATER: 2 Stock Units Diversion Limit: 0.056
acft. PERIOD OF USE: 01/01 TO 12/31

###DOMESTIC: 1 Family Diversion Limit: 0.45
acft. PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				Section
SOUTH WEST QUARTER				SOUTH EAST QUARTER					Totals
	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 28 T 8S R 3E SLBM									
0.2500									

0.2500

PLACE OF USE for STOCKWATERING**********

	NORTH-WEST¼				NORTH-EAST¼				SOUTH-WEST¼				SOUTH-EAST¼			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 28 T 8S R 3E SLBM					X											

APPLICATIONS FOR EXTENSIONS OF TIME WITHIN WHICH TO SUBMIT PROOF**********

FILED: 05/11/1994|PUB BEGAN: 08/04/1994|PUB ENDED: |NEWSPAPER: Spanish Fork Press
ProtestEnd:09/17/1994|PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate:01/19/1995|PROOF DUE: 11/30/1997

**********E N D O F D A T A**********

WATER RIGHT: 51-2967 APPLICATION/CLAIM NO.: A33199e CERT. NO.: 9116
CHANGES: a6634 Certificate 9116

OWNERSHIP**********

NAME: LAMC L.L.C.
ADDR: P.O. Box 50238
Provo, Utah 84605-0238

DATES, ETC.**********

LAND OWNED BY APPLICANT?
FILED: 08/31/1970|PRIORITY: 05/27/1961|PUB BEGAN: |PUB ENDED:
|NEWSPAPER:
ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: 08/30/1972|LAP, ETC:
|PROV LETTER:
RENOVATE: |RECON REQ: |TYPE: [ ]
PD Book No. Map:
Type of Right: Application to Appropriate Source of Info: Certificate
Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*******

FLOW: 0.03 cfs SOURCE: Underground Water Well
COUNTY: Utah COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)
(1) S 191 ft W 1499 ft from NE cor, Sec 28, T 8S, R 3E, SLBM

This is apparently the Far East Well.

NAD83					
Lat	40°	06'	1.23024"	40.10034173°	Spanish Fork Peak
Long	111°	36'	10.7695"	111.6029915°	

NAD27					
Lat	40°	06'	1.390"	40.10039°	Spanish Fork Peak
Long	111°	36'	8.061"	111.60224°	

DIAMETER OF WELL: 6 ins. DEPTH: 270 to ft. YEAR DRILLED: 1970 WELL LOG? Yes WELL ID#: 427060
Comment:

USES OF WATER RIGHT**********

SUPPLEMENTAL GROUP NO. 229408.

###IRRIGATION: 0.5 acres Diversion Limit: 0.0 acft.
PERIOD OF USE: 04/01 TO 10/31

###STOCKWATER: 2 Stock Units Diversion Limit:
PERIOD OF USE: 01/01 TO 12/31

###DOMESTIC: 2 Families Diversion Limit:
PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE: *-------NORTH WEST QUARTER------*-------NORTH EAST QUARTER------*-------SOUTH WEST QUARTER------*-------SOUTH EAST QUARTER------* Section

	* NW	NE	SW	SE *	NW	NE	SW	SE *	NW	NE	SW	SE *	Totals
Sec 28 T 8S R 3E SLBM	*			*				*				*	
0.5000				*				*				*	0.5000

PLACE OF USE for STOCKWATERING**********

	NORTH-WEST¼				NORTH-EAST¼				SOUTH-WEST¼				SOUTH-EAST¼			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 28 T 8S R 3E SLBM	*	:	:	: *	*	X:	:	: *	*	:	:	: *	*	:	:	: *

**********E N D O F D A T A**********

WATER RIGHT: 51-2967 CERT. NO.: 9116

CHANGE: a6634
BASE WATER RIGHTS: 51-2967
RIGHT EVIDENCED BY:
CHANGES: Point of Diversion [ ], Place of Use [ ], Nature of Use [ ], Reservoir Storage [ ].

FILED:	PRIORITY:	ADV BEGAN:	ADV ENDED:
NEWSPAPER:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [
ProtestEnd:	PROOF DUE:		
] ActionDate:	ELEC/PROOF: [ ]	ELEC/PROOF:	CERT/WUC: LAP, ETC:
EXTENSION:			
PROV LETTER:	RECON REQ:	TYPE: [ ]	
RENOVATE:			
Status: Certificate			

**********H E R E T O F O R E**********H E R E A F T E R**********

FLOW:	FLOW:
SOURCE:	SOURCE:
COUNTY: BAD-COUNTY	COUNTY: BAD-COUNTY COM DESC:
POINT(S) OF DIVERSION ------>	
NATURE OF USE ------>	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No

**********E N D O F D A T A**********

WATER RIGHT: 51-4729 APPLICATION/CLAIM NO.: A49654 CERT. NO.: 10313

OWNERSHIP**********

NAME: LAMC L.L.C.
ADDR: P.O. Box 50238
Provo, Utah 84605-0238

DATES, ETC.**********

LAND OWNED BY APPLICANT?
FILED: 06/17/1977|PRIORITY: 06/17/1977|PUB BEGAN: 09/15/1977|PUB ENDED:
|NEWSPAPER:
ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION:
[Approved]|ActionDate:01/18/1978|PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WDC: 06/09/1978|LAP, ETC:
|PROV LETTER:
RENOVATE: |RECON REQ: |TYPE: [ ]
PD Book No. Map:
Type of Right: Application to Appropriate Source of Info: Certificate Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*******

FLOW: 0.015 cfs SOURCE: Underground Water Well
COUNTY: Utah COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)
(1) S 76 ft E 737 ft from N4 cor, Sec 28, T 8S, R 3E, SLBM

DIAMETER OF WELL: 8 ins. DEPTH: 280 to ft. YEAR DRILLED: WELL LOG? NO WELL ID#: Comment:

This is apparently the West Well:

NAD83					
Lat	40°	06'	2.31118"	40.10064199°	Spanish Fork Peak
Long	111°	36'	16.14792"	111.6044855°	
NAD27					
Lat	40°	06'	2.471"	40.10069°	Spanish Fork Peak
Long	111°	36'	13.439"	111.60373°	

USES OF WATER RIGHT**********

SUPPLEMENTAL GROUP NO. 230676. Water Rights Appurtenant to the following use(s): 51-1,4729

###IRRIGATION: Group Total: 0.99 acres Diversion Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/31

Sole Supply for Irrigation for 51-4729 in this Group has NOT YET been evaluated

###DOMESTIC: Group Total: 1 Family Diversion Limit: PERIOD OF USE: 01/01 TO 12/31
Sole Supply for Families and/or Persons for 51-4729 in this Group has NOT YET been evaluated

###PLACE OF USE: *-------NORTH WEST QUARTER------*-------NORTH EAST QUARTER------*-------SOUTH WEST QUARTER------*-------SOUTH EAST QUARTER------* Section

	* NW	NE	SW	SE *	NW	NE	SW	SE *	NW	NE	SW	SE *	NW	NE	SW	SE *	Totals
Sec 28 T 8S R 3E SLBM *																	
0.9900																	0.9900

OTHER COMMENTS**********

See Memorandum Decision dated 01/18/1978

**********END OF DATA**********

Attachment B

Public Water System Master Report 10/26/2007

Utah Department of Environmental Quality
Division of Drinking Water
Public Water System Master Report

Run Date: 10/26/2007

PWS ID: UTAH25159 **Name:** NEW HAVEN-SPANISH FK CAN

Legal Contact NEW HAVEN-SPANISH FK CAN
JIM HONE

Rating: Not Approved
Rating Date: 5/11/07

Address: 2096 E 7200 S
SPANISH FORK, UT 84660

Phone Number: 801-794-1218

City Served (Area):

County: UTAH COUNTY

					Gal/Day	Gal/Min
System Type:	Non Transient	**Last Inv Update:**	6/22/07	**Avg Daily Prod:**	0	0
Activity Status Cd:	Active	**Last Snty Srv Dt:**	3/14/2007	**Total Dsgn Cap:**	0	0
Population:	46	**Oper Period:**	1/1 to 12/31	**Total Emerg Cap:**	0	0

Contacts

Contact Type	Name	Title	Phone Numbers: Office	Emergency	Email Address
AC	HONE, JIM		801-380-4375		

Service Connections

Connection Type	Meter Type Code	Meter Size	Number Connections
Residential	Unknown	0	0

0 *Total Svc Connections*

Treatment Plants

No.	Plant Name	Approved Design Capacity (gal/day)	Activity Date
TP001	EAST WELL	0	6/1/77
TP002	WEST WELL	0	4/16/07

Distribution System

Pump Type	Total Dyn Head ft H2O	Total Dyn Head P.S.I.	Pressure Adequate
	0	0	

Sources

No.	Source Name	Status	Source Type	Well Dia.	Appd Dsgn Cap/Meas Flow*	Location Data On File	Water Type	Availability
WS001	EAST WELL	Active	WL	0	0 GPM	No	GW	Other
WS002	WEST WELL	Active	WL	0	0 GPM	No	GW	Other
WS003	FAR WEST WELL	Active	WL			No	GW	Other

*Reports measured flow for wells, approved design capacity for all other sources.

Sampling and Monitoring Requirements

Total Coliform Rule Monitoring

Sample Count	Sample Type	Sample Frequency	Effective Begin Date	Effective End Date	Seasonal Start	Seasonal End	Analyte Code	Analyte Name
1	Routine	Quarterly	4/1/2006		1/1	12/31	3100	COLIFORM, TOTAL (TCR)

Non-TCR Individual Analyte Requirements

Facility ID	Facility Name	Analyte Code	Analyte Name	Sample Count	Sample Type	Sample Frequency	Last Sample	Next Sample Between
DS001	DISTRIBUTION SYSTEM							
			Lead & Copper	5	Routine	6M	6/30/2004	7/1/2004 - 12/30/2004
WS001	EAST WELL							
		1040	NITRATE (AS N)	1	Routine	Year	5/9/2007	Calc from last sample & freq
			Pesticides	1	Routine	3 years	8/10/2004	1/1/2007 - 12/31/2009
			Volatile Organics	1	Routine	Year	5/30/2007	1/1/2008 - 12/31/2008
			Sulfate	1	Routine	3 years	12/7/2004	1/1/2007 - 12/31/2009
			Inorg & Metals	1	Routine	3 years	12/7/2004	1/1/2007 - 12/31/2009
WS002	WEST WELL							
		1040	NITRATE (AS N)	1	Routine	Year	5/9/2007	Calc from last sample & freq
			Pesticides	1	Routine	3 years	4/13/2004	1/1/2007 - 12/31/2009
			Volatile Organics	1	Routine	Year	5/30/2007	1/1/2008 - 12/31/2008
			Sulfate	1	Routine	3 years	1/29/2004	1/1/2007 - 12/31/2009
			Inorg & Metals	1	Routine	3 years	1/29/2004	1/1/2007 - 12/31/2009
WS003	FAR WEST WELL							
		1040	NITRATE (AS N)	1	Routine	Year	5/9/2007	Calc from last sample & freq
			Sulfate	1	Routine	3 years		Begin Sampling Immediately
			Radionuclides	1	Routine	Quarter		Begin Sampling Immediately
			Pesticides	1	Routine	Quarter		Begin Sampling Immediately
			Volatile Organics	1	Routine	Year	5/30/2007	1/1/2008 - 12/31/2008
			Inorg & Metals	1	Routine	3 years		Begin Sampling Immediately

Improvement Priority System

Total IPS Points: 628 **Rating Date:** 5/11/2007 **Rating:** Not Approved

Violation Pts*:	40
Admin & Physical Facilities:	558
Operator Certification Pts:	30

* Total violation points may not agree with the detail section. The detail secions show all 'open' violations; the violation points total adjusts for duplicate violations

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code **Description**

C001 OPERATOR NOT CERT TO LEVEL REQUIRED FOR SYSTEM

Facility	Date Determined	PWS Notified	Max Pts
	3/14/2007		0

D012 REC - FIRE HYDRANT USE POLICY INADEQUATE

Facility	Date Determined	PWS Notified	Max Pts
DS001 DISTRIBUTION SYSTEM	3/14/2007		0

D017 INADEQUATE SAMPLE SITES FOR RESIDUAL TESTING

Facility	Date Determined	PWS Notified	Max Pts
TP002 WEST WELL	3/14/2007		0

D018 IMPROPER BATCH DISINFECTION PRACTICES

Facility	Date Determined	PWS Notified	Max Pts
DS001 DISTRIBUTION SYSTEM	3/14/2007		10

D019 INADEQUATE DISTRIBUTION CAPACITY FOR FIREFLOW

Facility	Date Determined	PWS Notified	Max Pts
DS001 DISTRIBUTION SYSTEM	3/14/2007		5

G001 WATER SYSTEM FACILITY LACKS PLAN APPROVAL

Facility	Date Determined	PWS Notified	Max Pts
	3/14/2007		50

M000 OLD FINANCIAL MGMT PLAN IN PLACE

Facility	Date Determined	PWS Notified	Max Pts
	7/17/2003	7/17/2003	0

SYSTEM HAS WITTEN FINANCIAL MANAGEMENT PLAN

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
M003	CCC-LACKS LOCAL AUTHORITY		3/14/2007		10
M006	CCC-LACKS WRITTEN RECORDS		3/14/2007		10
M007	CCC-LACKS ON-GOING ENFORCEMENT PLAN		3/14/2007		10
M020	UNPROTECTED CROSS CONN PRESENT IN DIST SYSTEM		3/14/2007		50
R004	NO ACCESS TO LAB OR TEST KITS FOR PROCESS TESTING	*TP001 EAST WELL*	3/14/2007		2
R005	EXPIRED CHEM REAGENT USED FOR PROCESS CONTROL TEST	*TP001 EAST WELL*	3/14/2007		5
S001	SOURCE LACKS PLAN APPROVAL	*WS001 EAST WELL*	11/17/2003	11/17/2003	150

THE SYSTEM HAS NOT SUBMITTED ENGINEERING PLANS FOR REVIEW AND APPROVALTHE SYSTEM HAS NOT SUBMITTED A PRELIMINARY EVALUATION REPORT NOR HAVE THEY SUBMITTED A SOURCE PROTECTION PLAN FOR EITHER THE EAST OR WEST WELLS

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
S002	WELL HOUSE NOT SECURE	*WS001 EAST WELL*	3/14/2007		20
		WS003 FAR WEST WELL	3/14/2007		
		WS002 WEST WELL	3/14/2007		

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
S002	ELEVATION OF WELL CASING INADEQUATE				20
		WS003 FAR WEST WELL	3/14/2007		
S013	WELL LACKS PROPER SANITARY SEAL				50
		WS003 FAR WEST WELL	3/14/2007		
		WS002 WEST WELL	3/14/2007		
		WS001 EAST WELL	3/14/2007		
S015	WELL LACKS A MEANS TO MEASURE DRAWDOWN				1
		WS003 FAR WEST WELL	3/14/2007		
		WS002 WEST WELL	3/14/2007		
		WS001 EAST WELL	3/14/2007		
S021	UNPROTECTED CROSS CONN PRESENT IN WELL HOUSE				5
		WS003 FAR WEST WELL	3/14/2007		
		WS002 WEST WELL	3/14/2007		
		WS001 EAST WELL	3/14/2007		
S022	LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN				5
		WS003 FAR WEST WELL	3/14/2007		
		WS002 WEST WELL	3/14/2007		
		WS001 EAST WELL	3/14/2007		

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description

S023 NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

Facility	Date Determined	PWS Notified	Max Pts
WS001 EAST WELL	7/17/2003	7/17/2003	1

THE DISCHARGE PIPING FOR THE EAST WELL NEEDS SMOOTHED NOSE SAMPLING TAP

WS003 FAR WEST WELL	3/14/2007	

NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

WS002 WEST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE WEST WELL NEEDS A SMOOTHED NOSE SAMPLING TAP

S024 NO CHECK VALVE ON DISCHARGE PIPING

Facility	Date Determined	PWS Notified	Max Pts
WS003 FAR WEST WELL	3/14/2007		1

NO CHECK VALVE ON DISCHARGE PIPING

WS002 WEST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE WEST WELL NEEDS CHECK VALVE

WS001 EAST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE EAST WELL NEEDS CHECK VALVE

S025 NO PRESSURE GAUGE ON DISCHARGE PIPING

Facility	Date Determined	PWS Notified	Max Pts
WS003 FAR WEST WELL	3/14/2007		1

NO PRESSURE GAUGE ON DISCHARGE PIPING

WS002 WEST WELL	3/14/2007	

NO PRESSURE GAUGE ON DISCHARGE PIPING

WS001 EAST WELL	3/14/2007	

NO PRESSURE GAUGE ON DISCHARGE PIPING

S026 NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

Facility	Date Determined	PWS Notified	Max Pts
WS003 FAR WEST WELL	3/14/2007		1

NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

WS002 WEST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE WEST WELL NEEDS MEASURING DEVICE

WS001 EAST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE EAST WELL NEEDS MEASURING DEVICE

S027 NO SHUT OFF VALVE ON DISCHARGE PIPING

Facility	Date Determined	PWS Notified	Max Pts
WS003 FAR WEST WELL	3/14/2007		1

NO SHUT OFF VALVE ON DISCHARGE PIPING

WS002 WEST WELL	7/17/2003	7/17/2003

THE DISCHARGE PIPING FOR THE WEST WELL NEEDS SHUT OFF VALVE

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
S027	NO SHUT OFF VALVE ON DISCHARGE PIPING	WS001 EAST WELL	7/17/2003	7/17/2003	1

THE DISCHARGE PIPING FOR THE EAST WELL NEEDS SHUT OFF VALVE

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
SP02	NO CURRENT COPY OF SOURCE PROTECTION PLAN ON SITE		3/14/2007		30

STEVEN ONYSKO FOUND EXCEPTION IN FILE - JHO
10/22/07 DEFICIENCY REINSTATED - EXCEPTION EXPIERED SEPTEMBER 2007 - JHO

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
SP06	UNAPPROVED SOURCE NO PRELIM EVALUATION REPORT		3/14/2007		0

PER IS REQUIRED FOR SOURCE 03

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
SP08	OLD SOURCE LACKS A DWSP PLAN		3/14/2007		30

STEVEN ONYSKO FOUND EXCEPTION IN FILE - JHO
10/22/07 DEFICIENCY REINSTATED - EXCEPTION EXPIERED SEPTEMBER 2007 - JHO

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
SP09	NO DWSP REVISION SUBMITTED AFTER REDEV OF SOURCE		3/14/2007		20

STEVEN ONYSKO FOUND EXCEPTION IN FILE - JHO
10/22/07 DEFICIENCY REINSTATED - EXCEPTION EXPIERED SEPTEMBER 2007 - JHO

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
T023	NO SAMPLE TAP AT FILTER EFFLUENT	TP001 EAST WELL	3/14/2007		0

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
T031	NO DISINFECT USD-REDUCE FOULING/MICROBIAL PAS THRU	TP001 EAST WELL	3/14/2007		0

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
T036	CL2 CONTACT TIME IS INSUFFICIENT	TP002 WEST WELL	3/14/2007		0

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
T079	NO MEANS OF MEASURING WATER TREATED WITH CHLORINE	TP002 WEST WELL	3/14/2007		2

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description

TG02 SOLUTION FEEDER LACKS BACKFLOW PROTECTION

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG03 TANKS AND REFILL LINES LACK PROPER LABELING

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG04 CHEMICALS ARE STORED IMPROPERLY

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG07 FEED EQUIPMENT IS NOT OPERABLE

Facility	Date Determined	PWS Notified	Max Pts
TP002 WEST WELL	3/14/2007		0

TG12 NO ANTISIPHON PROTECTION ON EACH FEED PUMP

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG20 DAILY RECORDS DO NOT REFLECT DOSAGES & TOTALS

Facility	Date Determined	PWS Notified	Max Pts
TP002 WEST WELL	3/14/2007		2

TG21 CHEMICAL FEEDERS IMPROPERLY CALIBRATED

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG22 NO PROVISIONS FOR MEASURING TOTAL CHEMICAL USE

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

TG27 CHEMICALS DO NOT COMPLY WITH ANSI/NSF STANDARD

Facility	Date Determined	PWS Notified	Max Pts
TP001 EAST WELL	3/14/2007		2

Physical Facility, Administrative, & Source Protection Deficiencies from Site Visits

Code	Description	Facility	Date Determined	PWS Notified	Max Pts
TG31	NO FINISHED WATER SAMPLE TAP	TP001 EAST WELL	3/14/2007		2
		TP002 WEST WELL	3/14/2007	4/13/2007	
TG32	INADEQUATE PROCESS CONTROL TESTING	TP001 EAST WELL	3/14/2007		10
V034	SYSTEM LACKS > 40% OF REQUIRED STORAGE CAPACITY		3/14/2007		50

Total Deficiency Pts 558

Chemical Monitoring and Quality Violations

Violation No.	Period	Code	Violation Type Analyte/ Group	IPS Points
2007-1988	04/01/07-06/30/07	03	MONITORING, ROUTINE MAJOR	20
12361	8/6/2007		Radionuclides	
2007-1976	04/01/07-06/30/07	03	MONITORING, ROUTINE MAJOR	20
12356	8/6/2007		Pesticides	

Total Chemical Violation Points 40

Operator Certification Points

	Distribution	Treatment		
Level Required	SS			
Highest Certificate on Record				
Points	30	0	Total Points	30

Certified Operators

License Number	Operator Name	Address	CEU's	Cert Grade	Expiration
23150	BUNTING, DAMON L	5 BURNS DR, CUT BANK, MT 59427	1.9	SS	12/31/2006

Total Coliform Sample History

For the twelve months beginning 10/1/2006

	Routine Samples			Repeat Samples			Investigative Samples		
	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.
Oct	3	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0
Dec	4	1	0	4	0	0	0	0	0
Jan	4	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0
Apr	4	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0	0
Jul	4	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0

Division Staff

Division Director: Kenneth H. Bousfield (801) 536-4200

Compliance Section

The Rules Section is responsible for promulgating corresponding State rules required by the Federal Safe Drinking Water Act. Report program and compliance data to EPA. Provide outreach seminars on drinking water rules for water system managers and operators. Conduct sanitary surveys and provide technical assistance to water system managers. Track compliance of all public drinking water systems for monitoring, reporting and quality requirements. Coordinates with the State Health Laboratory on analytical issues.

Engineering Section

The Engineering Section is responsible for reviewing drinking water project plans and specifications for compliance with State rules and sound engineering principles, inspect drinking water projects under construction for adherence to approvals given, and inspect water treatment plants.

Special Services Section

The Administrative Services Section is responsible for administering the Drinking Water Source Protection Program, providing technical assistance to water treatment plants, conducting special studies, and providing support services (budgeting, purchasing, contracting, grants administration, etc.) for the Division.

Patti Fauver, Manager	(801)536-4196
Rachael Cassady	(801)536-4467
Mark Hansen	(801)536-4205
Cheri Heath	(801)536-0070
Brad Holdaway	(801)536-0063
Janet Lee	(801)536-0088
Don Lore	(801)536-4204
John Oakeson	(801)536-0057
Brett Shakespear	(801)536-4198

Ken Wilde, Manager	(801)536-4197
Mark Bertleson	(801)536-0087
Bill Birkes	(801)536-4201
Julie Cobleigh	(801)536-4197
Michael Grange	(801)536-0069
Bob Hart	(801)536-0054
Mike Mortensen	(801)536-0039
Steve Onysko	(801)536-0096
Rich Peterson	(801)536-4053
Frank Roberts	(801)536-0098
Karin Tatum	(801)536-0099

Kate Johnson, Manager	(801)536-4206
Mark Jensen	(801)536-4199
Jim Martin	(801)536-4494
Eva Nieminski	(801)536-4189

Division FAX Number ..... (801) 536-4211

Visit our website at: http://drinkingwater.utah.gov

OCTOBER 30, 2007
LETTER

State of Utah

Department of Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

October 30, 2007

Lynn Overtree
Long Valley Estates
610 San Miguel Canyon Road
Royal Oaks, California 95076

Dear Mr. Overtree:

Subject: Notice of Violation and Administrative Order, Long Valley Estates Drinking Water System #UTAH13050

Division of Drinking Water records indicates that you are the responsible party for the Long Valley Estates drinking water system.

Long Valley Estates drinking water system is a public water system and as such is subject to the Administrative Rules for Public Drinking Water Systems (copy available upon request). Under Utah Administrative Code R309-100-4, a water system is considered a public water system when 25 or more people are served water for at least 60 days, or 15 or more water system connections are served.

In the last year of operation, 304 points have been accessed against Long Valley Estates drinking water system. Under our Improvement Priority System (IPS) Non-community water systems exceeding 120 points are rated "Not Approved" and placed on a priority list for enforcement actions. The Long Valley Estates drinking water system is currently rated "Not Approved" by our office. Further, because of these violations, the Drinking Water Board is issuing the attached Notice of Violation and Order (NOVO) to ensure compliance.

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Please give this order your immediate attention. A written response is required within 30 days after receipt of this NOVO. This order is fully enforceable unless appealed in writing within 30 days, as described in the "Notice" section of the Notice of Violation and Order. Any response or written answer to this NOVO should be addressed to Ken Bousfield, P.E., Executive Secretary, Drinking Water Board, c/o Division of Drinking Water, 150 North 1950 West, P. O. Box 144830, Salt Lake City, Utah 84114-4830.

If you have any questions, or wish to review the water system on-site please call Elden Olsen, of my staff, at (801) 536-4097. A phone call to the Division of Drinking Water or an on-site visit does not alter the requirement to timely respond in writing if you wish to contest this NOVO.

Sincerely,

DRINKING WATER BOARD

Kenneth H. Bousfield, P.E.
Executive Secretary

ELO

Attachments

cc: Fred Nelson, Assistant Attorney General
John Chartier, P.E. District Engineer, Southwest Utah Public Health Department
Randy Taylor, P.E., District Engineer, Southwest Utah Public Health Department
Rod Cosslett, E.H.S., Southwest Utah Public Health Department
Kathelene Brainich, US EPA Region 8 Denver
Kane County Commission, 76 North Main St, Kanab, UT 84741
Kane County Building Inspector, 76 North Main St, Kanab, UT 84741

U:\dr_water\COMPLI\jyee\wp\Compli\Elden\Long Valley Estates AO.doc

DRINKING WATER BOARD

In the Matter of: **Long Valley Estates Drinking Water System #UTAH13050**	**Notice of Violation and Order** **Case No. 0709542**

The Drinking Water Board ("Board") issues this Notice of Violation and Order under the Utah Safe Drinking Water Act ("Act"), Utah Code Annotated §§ 19-4-104, -105, -106, -107, and -109, Utah Administrative Code ("UAC") Rules 309-100 to-705 and in accordance with the Utah Administrative Procedures Act, Utah Code Annotated §§ 63-46b -0.5 to -23.

FACTS AND VIOLATIONS

1. The **Long Valley Estates** Drinking Water System is a public water system in Iron County that provides drinking water to approximately 200 people through 40 active connections. Lynn Overtree is the Manager of the **Long Valley Estates** Drinking Water System.

2. A copy of **Long Valley Estates** Drinking Water System's IPS report (copy enclosed) delineates the **304** points that have been assessed against the water system.

3. Based on the Division of Drinking Water's records, the **Long Valley Estates** Drinking Water System has bacteriologic quality and monitoring violations in violation of UAC R309-210-5 as follows:

    A. Major bacteriological routine monitoring violation in 7/1/06 – 9/30/06.
    B. Major bacteriological routine monitoring violation in 10/1/06 – 12/31/06.

4. Based on Division of Drinking Water's records, **Long Valley Estates** ST001 Long Valley storage tank is not secure. This is in violation of UAC R309-545-18.

5. **Long Valley Estates** has failed to complete source protection plan for WS003 (Long Valley Estates Well) in violation of UAC R309-600-7.

    A. Long Valley Estates does not have a current inventory of contamination sources.
    B. Long Valley Estates does not have a land management strategy on file.

ORDER

As a part of your responsibilities under Utah Administrative Code, R309-100-9, the management of the **Long Valley Estates** is hereby ordered to provide the Division of Drinking Water written evidence of completion of the following items according to the deadlines given below:

1. **Long Valley Estates** must immediately begin to come into compliance with all monitoring requirements of UAC R309-210-5 involving bacteriologic monitoring.

2. **Long Valley Estates** must secure the Long Valley Estates storage tank ST001 as required by UAC R309-545-18.

3. **Long Valley Estates** is required to develop, submit and implement a Drinking Water Source Protection (DWSP) plan for its sources and update and must resubmit the DWSP plan every 6 years as required by UAC R309-600-7.

NOTICE

If the management of Long Valley Estates Drinking Water System wishes to contest this "Notice of Violation and Order", they must respond in writing and request a hearing before the Board. The response and request for hearing must be received by the Executive Secretary (at the address below) within 30 days of the date shown on the certificate of mailing. See Utah Code Annotated § 63-46b-3 (2)(a)(vi) and Utah Code Annotated § 63-46b-12. **If you do not request a hearing in writing and participate in the hearing, the Order will become final and you will not be allowed to contest this Notice of Violation in court.** See Utah Code Annotated § 63-46b-14 (2). Utah Code Annotated § 19-4-109 states that anyone who violates the Utah Safe Drinking Water Act, permit, rule, or order is subject to a civil penalty of up to $1,000 per day of violation. Willful violators may be fined up to $5,000 per day.

Issued this 30 day of October, 2007.

DRINKING WATER BOARD

By: Kenneth Bousfield

Kenneth H. Bousfield, P.E.
Executive Secretary
Drinking Water Board
C/O Division of Drinking Water
P.O. Box 144830
Salt Lake City, Utah 84414-4830
Phone: (801) 536-4200

CERTIFICATE OF MAILING

I certify that on October 30, 2001, I caused to be mailed a true and correct copy of the Foregoing NOTICE OF VIOLATION AND ORDER to:

BY CERTIFIED MAIL TO:

Lynn Overtree
Long Valley Estates
610 San Miguel Can R
Royal Oaks, California 95076

BY REGULAR MAIL TO:

Kathelene Brainich
U.S. EPA Region VIII
P-W-TF
1595 Wynkoop Street
Denver, Colorado 80202-1129

Fred Nelson
Attorney Generals Office
160 East 300 South, Fifth Floor
P.O. Box 140873
Salt Lake City, Utah 84114-0873

Rod Cosslett, Environmental Director
Southwest Utah Public Health Department
260 DL Sargent Drive
Cedar City, Utah 84720

John Chartier, P.E., District Engineer
Southwest District Office
260 DL Sargent Drive
Cedar City, Utah 84720

Randy Taylor, P.E., District Engineer
Southwest District Office
168 East 100 North
St. George, Utah 84770

Kane County Commission
76 North Main St
Kanab, Utah 84741

Kane County Building Inspector
76 North Main St
Kanab, Utah 84741

Kenneth H. Bousfield, P.E.
Executive Secretary

Attachment A

Explanation and Required Elements for Public Notice To Be Sent to Each Customer of Your Water System. The following violations have occurred for the Arrowhead Investment Inc., Drinking Water System:

Failure to take routine monitoring in 7/1/06 – 9/31/06 and 10/01/06 – 12/31/06.

Long Valley Estates must monitor for bacteriologic quality of 1 sample per quarter for the 2nd, 3rd and 4th quarters. When a violation occurs, we must notify our customers in writing. A major monitoring violation occurs when no samples were collected during the month. For Arrowhead Investment Inc., one bacteriologic sample must be collected each quarter except the 4th quarter. If a sample is unsatisfactory, at least four "repeat" samples must be collected DURING THE SAME MONTH. In addition, the following month, at least five additional samples must be collected. A major repeat monitoring violation occurs when no "repeat" samples are collected for any unsatisfactory sample. A non-acute MCL Quality violation occurs when a system collecting less than 40 total coliform samples per month has one or more total coliform-positive sample during the month

Bacteriologic sampling is performed because the U.S. Environmental Protection Agency (EPA) has determined that the presence of total coliforms (the organism tested for) is a possible health concern. Total Coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include: diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than one total coliform-positive sample per month may be present. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

Finally, Long valley Estates Drinking Water System management should include a brief statement describing why the violations occurred (perhaps the sampler was not aware of the sampling requirements) and what you are doing to prevent the violations discussed above from reoccurring (perhaps by saying he/she is receiving additional sampling training, etc.).

Attachment B

Sanitary Survey results of surveys conducted June 5, 2007 by Elden L. Olsen of the Division of Drinking Water.

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

June 14, 2007

Jeff Hoyt
Long Valley Estates
PO Box 1262
Duck Creek Village, Utah 84765

Dear Mr. Hoyt

Subject: Sanitary Survey Long Valley Estates System # 13050

I would like to thank you and Ray Kiney for taking the time to meet with me to conduct a sanitary survey of the Long valley Estates drinking water system on June 5, 2007.

The Utah Division of Drinking Water Improvement Priority System Rule, R309-150, rates public drinking water systems. Points are assigned based on violations of the Drinking Water Rules found. Points assessed during a sanitary survey will become part of the total IPS points if not corrected within the time frame specified in this report. Any Community system that exceeds 150 points will be rated as "Not Approved" if corrections are not made.

The following deficiencies were noted during the sanitary survey:

1. Storage Facility access opening is lacking a proper gasket. **20 IPS** points have been assigned to this deficiency. These points become effective June 5, 2007

2. Storage Facility access opening is lacking a proper gasket. **3 IPS** points have been assigned to this deficiency. These points become effective September 13, 2007.

3. Long valley Estates source protection plans were submitted but disapproved. **150 IPS** points have been assigned for this deficiency. These points become effective June 5, 2007.

4. Long Valley Well lacks: 1) a smoothed nosed sampling tap, 2) a pressure gauge, 3) a flow meter have an emergency Response Plan. One point for each item. **3 IPS** points have been assigned for this deficiency. These points become effective

September 14, 2007.

5. Long Valley Well has no means to release trapped air from pump. 6 IPS points have been assigned for this deficiency.

Enclosed are copies of the completed survey questions and deficiency report. The Division of Drinking Water will provide a copy of your IPS Report after their staff has transferred the sanitary survey information into their main database.

We encourage you to take the necessary actions to correct the noted deficiencies. Once the deficiencies are corrected, please use the enclosed *IPS Deficiency Correction Notice* to notify our office so that we can delete the appropriate IPS points assigned for that deficiency. Please use your water system number **13050** in all of your correspondence to our office.

If you have questions or if we can be of further assistance in preparing for your survey please feel free to contact me at (801) 536-4097 or e-mail Eldenolsen@utah.gov .

Sincerely,

Elden L. Olsen
Environmental Scientist

Enclosures

cc: Rod Cosslet
Randy Taylor
John Chartier

U:\dr_water\COMPL\Eldenolsen\sansur\sansur 2007\Southwest\Long Valley Estates_13050_ss Report letter

Sanitary Survey - Deficiency Report

PWS Number: UTAH13050 **Total Demerit Points:** 182 **Survey Date:** 6/14/2007

Survey Name: LONG VALLEY ESTATES **Surveyor Name:** Elden Olsen

Sanitary Survey Category: FW

SDWIS Severity Code: Significant Deficiency

Storage / STORAGE FACILITY ST001 - (Active) / Components

Are outside access hatches locked?

Answer Recorded No

Comments: R309-545-14(3) **R309-545-14(3) requires any access opening shall have a locking device. 20 demerit points. This deficiency should be corrected immediately.**

Notes: x no lock and need to manufacture a bar for the lock,

Demerit Points: 20

Days to Correct Deficiency: 0

SDWIS Deficiency Description: V029

SDWIS Severity Code: Minor Deficiency

Storage / STORAGE FACILITY ST001 - (Active) / Components

Access openings: Is the lid properly gasketed?

Answer Recorded No

Comments: R309-545-14(2) **R309-545-14(2) states the frame of any access opening shall be provided with a close fitting solid shoebox type cover which extends down around the frame at least two inches and is furnished with a gasket(s) between the lid and frame. 3 demerit points. This deficiency should be corrected within 90 days of notification.**

Notes:

Demerit Points: 3

Days to Correct Deficiency: 90

SDWIS Deficiency Description: V009 STORAGE FACILITY ACCESS LACKS PROPER GASKET

Sanitary Survey Category: SO

SDWIS Severity Code: Significant Deficiency

Sources / General / General

Are there any undocumented source(s) physically connected to the drinking water system? (If source is not on system inventory mark "yes")

Answer Recorded Yes

Comments: R309-105-6 **R309-105-6 requires all construction of public drinking water facilities be approved in writing by the Division of Drinking Water. 150 demerit points. This deficiency should be corrected immediately.**

Notes: x plan was submitted but was rejected by the State.

Demerit Points: 150

Days to Correct Deficiency: 0

SDWIS Deficiency Description: S001 SOURCE LACKS PLAN APPROVAL

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / LONG VALLEY WEL - (Active) / Pumps

Pump discharge piping: a smooth-nosed sampling tap?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S023 NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / LONG VALLEY WEL - (Active) / Pumps

Pump discharge piping: pressure gauge?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S025 NO PRESSURE GAUGE ON DISCHARGE PIPING

Pump discharge piping: flow meter?

Answer Recorded No

Comments: R309-515-6(12)(e)(iv) **R309-515-6(12)(e)(iv) states the discharge piping shall be equipped with (in order of placement from the wellhead) a smooth nosed sampling tap, a check valve, apressure guage, a means of measuring flow and a shutoff valve. 1 demerit point per item missing. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 1

Days to Correct Deficiency: 90

SDWIS Deficiency Description: S026 NO FLOW MEASURING DEVICE ON DISCHARGE PIPING

Sanitary Survey Category: SO

SDWIS Severity Code: Minor Deficiency

Sources / Groundwater / LONG VALLEY WEL - (Active) / Pumps

Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?

Answer Recorded No

Comments: R309-515-6(12)(e)(V) **R309-515-6(12)(e)(v) requires a well that pumps directly into the distribution system be equipped with an air release vacuum relief valve located upstream of the check valve. 6 demerit points. This deficiency should be corrected within 90 days.**

Notes:

Demerit Points: 6

Days to Correct Deficiency: 90

SDWIS Deficiency Description: SL01 NO MEANS TO RELEASE TRAPPED AIR FROM SOURCE PUMP

Sanitary Survey - Survey Responses

PWS Number: UTAH13050 **Survey ID:** 564 **Survey Date:** 6/14/2007

Survey Name: LONG VALLEY ESTATES **User Name:** Elden Olsen

Question Number

General / Background Info

Name/Location:

1 Name of public water system: LONG VALLEY ESTATES

2 PWS number: UTAH13050

3 Physical address

Notes: x Hwy 89 3Miles North of Long Valley Junction to Cedar City

4 County: Kane

5 Local Health Department

- ☐ Bear River HD
- ☐ Central Utah HD
- ☐ Davis County HD
- ☐ Salt Lake County HD
- ☐ Southeast Utah HD
- ☑ Southwest Utah HD
- ☐ Summitt County HD
- ☐ Tooele County HD

General / Background Info

Classification:

1 Total System - Design Water Production / Treatment Capacity (MGD): 0

2 Actual average daily demand (MGD): 0

3 Actual peak daily demand (MGD):

4 SDWA classification of system

- ☐ C - Community
- ☑ NC - Non Community transient
- ☐ NP - Non Public
- ☐ NTNC - Non Transient Non Co

5 Number of service connections:

Question Number		
5.01	Number of residential connections:	40
6	Residential population:	200
7	**Seasonal operation?**	☐ Yes ☑ No ☐ NA ☐ Unknown
7.01	Numeric Month of opening.	5
7.02	Numeric Day of opening.	1
7.03	Numeric Month of closing.	10
7.04	Numeric Day of closing.	31
8	**Purchase water?**	☐ Yes ☑ No ☐ NA ☐ Unknown
8.1	If yes, name of system purchased from:	
8.2	System purchased from - PWS number:	
9	**Sell water?**	☐ Yes ☑ No ☐ NA ☐ Unknown
9.01	If yes, name of system sell to:	
9.02	System(s) sold to PWS number:	

General / Background Info

Owner:

1	Owner type:	☐ F - Federal ☐ L - Local ☐ M - Mixed ☐ N - Native American ☑ P - Private ☐ S - State Government
2	Legal ownership by (name or entity)	UTAH13050
3	Principal Executive or CEO, Last Name	OVERTREE
4	Principal Executive or CEO, First Name	LYNN
5	Owner's address	610 San Miguel Canyon Road
6	Owner's address - City	ROYAL OAKS
7	Owner's address - State	☐ UT
8	Owner's address - Zip code	95076
9	Owner's telephone	
10	Owner's email address	

General / Background Info

Staff:

1	System Manager's Last name	OVERTREE
2	System Manager's First name	LYNN

Question Number		
3	System Manager's address	610 SAN MIGUEL CAN R
4	System Manager's address - City	ROYAL OAKS
5	System Manager's address - State	☐ AL - Alberta ☐ BC - British Columbia ☐ MB - Manitoba ☐ NB - New Brunswick ☐ NF - Newfoundland ☐ NT - Northwest Territories ☐ NS - Nova Scotia ☐ ON - Ontario
6	System Manager's address - Zip code	95076
7	System Manager's telephone	
8	System Manager's email address	
9	Main Operator's Last name	Hoyt
10	Main Operator's First name	Jeff
11	Main Operator's address	11 Empty Saddle
12	Main Operator's address - City	Duck Creek Village
13	Main Operator's address - State	☐ AL - Alberta ☐ BC - British Columbia ☐ MB - Manitoba ☐ NB - New Brunswick ☐ NF - Newfoundland ☐ NT - Northwest Territories ☐ NS - Nova Scotia ☐ ON - Ontario
14	Main Operator's address - Zip code	84762
15	Main Operator's telephone	4356824779

Question Number		
16	Main Operator's email address	jhoyt1@yahoo.com
17	Main Operator's Certification Level	D2 & T1
18	Emergency phone number.	4356163012
19	System FAX number.	4356823526

General / Background Info

Previous Survey Info:

1	Date of last sanitary survey:	7/13/2000
2	Last survey conducted by - name	
3	**List deficiencies from previous survey**	
3.01	Have all deficiencies noted during previous survey been corrected?	☐ Yes ☐ No ☐ NA ☐ Unknown
3.02	If no, list item number for remaining deficiencies	

General / SDWIS Site Visit Info

1	Reason for the visit.	☑ SNSV - Sanitary Survey ☐ SSVF - Sanitary Survey Follow- ☐ SHAZ - Sanitary Hazards Invest ☐ TRTP - Water Treatment Plant ☐ TRNG - Training ☐ LABC - Laboratory certificat ☐ EMRG - Emergency assistan ☐ ENGR - Engineering
2	Questions sent to water system on:	05/17/2007
3	Notify Local Health Department.	05/17/2007

Question Number		
4	Date of the survey	06/05/2007
5	Survey Status	☑ C - Completed ☐ P - Planned
6	Last name of surveyor:	Olsen
7	First name of surveyor.	Elden L
8	Surveyor's organization	DDW
9	Surveyor phone number	8015364097
10	Surveyor e-mail	Eldenolsen@utah.gov
11	Water system representatives present during the survey:	Jeff Hoyt
	Notes: Ray Kiney - Long Valley Estats worker	
12	Official notification of report results sent to water system.	06/12/2007

Regulations / Plans/Records

1	Does the (TCR) sample site plan meet the minimum requirements? (Answer no, if no plan is present)	☑ Yes ☐ No ☐ NA ☐ Unknown

Management / General

1	Does the system haul water?	☐ Yes ☑ No ☐ NA ☐ Unknown
101	Is the water system a community water system?	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
1.02	For non-community public water systems is there any other way to supply good quality drinking water?	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Are the DDW guidelines for water hauling followed? (ie draw water from an approved source, periodically clean and disinfect equipment, load, disinfect water and unload water properly)	☐ Yes ☐ No ☐ NA ☐ Unknown
2	Have there been any customer complaints about a new taste, odor, color, or other physical change (oily, filmy, burns on contact with skin, etc) with regard to the water provided?	☐ Yes ☑ No ☐ NA ☐ Unknown
3	Is there a procedure in place to respond immediately to such customer complaint?	☑ Yes ☐ No ☐ NA ☐ Unknown

Management / Planning

General:

1	**The system does not meet the required source capacity requirements? (Answer "No" if source capacity is adequate, use Excel spreadsheet for calculations)**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Does the system meet a minimum of 90% of the required source capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.02	Does the system meet a minimum of 80% of the required source capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Does the system meet a minimum of 70% of the required source capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.04	Does the system meet a minimum of 60% of the required source capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.05	Does the system meets less than 60% of the required source capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
2	**The system does not meet the required storage capacity requirements? (Answer "No" if storage capacity is adequate, use Excel spreadsheet for calculations)**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Does the system meet a minimum of 90% of the required storage capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
2.02	Does the system meet a minimum of 80% of the required storage capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
2.03	Does the system meet a minimum of 70% of the required storage capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
2.04	Does the system meet a minimum of 60% of the required storage capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
2.05	Does the system meet less than 60% of the required storage capacity? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
3	**Has there been any recent modifications to the water system?**	☐ Yes ☑ No ☐ NA ☐ Unknown
3.01	DDW review of recent modifications:	☐ Yes ☐ No ☐ NA ☐ Unknown
3.02	Recent modifications - Briefly describe the project.	_____ _____
4	Are there any undocumented water system facilities? (i.e. tanks, pump stations, treatment facilities, etc.)	☐ Yes ☑ No ☐ NA ☐ Unknown

Management / Emergency Response

1	**Does your system serve less than 3300 in population?**	☑ Yes ☐ No ☐ NA ☐ Unknown
1.01	Does your system have a written Emergency Response Plan?	☐ Yes ☐ No ☑ NA ☐ Unknown
1.02	Has your Emergency Response Plan been updated within the last 3 years?	☐ Yes ☐ No ☑ NA ☐ Unknown
2	**Does your system serve a population of 3300 or greater?**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Does your system have the EPA required Emergency Response Plan?	☐ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
2.02	Has your Emergency Response Plan been updated within the last 3 years?	☐ Yes ☐ No ☐ NA ☐ Unknown

Management / Cross-Connections

1	Are there any unprotected connections between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system?	☐ Yes ☑ No ☐ NA ☐ Unknown
2	**Does the water system have all 5 of the following elements of a written cross-connection control program ?**	
2.01	Legally adopted authority statement?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.02	Documentation of annual public awareness and/or employee training?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.03	Documentation of personnel trained to manage the program?	☑ Yes ☐ No ☐ NA ☐ Unknown
Flagged for Follow-up	Notes: Jeff Hoyt	
2.04	Records of hazards found, protection required and installed, enforcement actions, assembly testing etc.?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.05	Documentation of on-going program enforcement? (ie records of periodic hazard assessments, annual test report, updated assembly inventory, etc)	☑ Yes ☐ No ☐ NA ☐ Unknown

Management / Staffing

1	Is the main operator properly certified at the level required for the system?	☑ Yes ☐ No ☐ NA ☐ Unknown
2	If there is a certified operator, are they available within 1 hour travel time at all times as required by R309-300 (Operator Certification Rule)? (If no certified operator is present answer NA)	☑ Yes ☐ No ☐ NA ☐ Unknown

Management / Source Protection

1	Has the system appointed a designated person for their source protection program and notified the Division of Drinking Water who that person is?	☑ Yes ☐ No ☐ NA ☐ Unknown
	Notes: Jeff Hoyt	

Question Number		
2	Is their phone number and address different from the water system?	☐ Yes ☑ No ☐ NA ☐ Unknown
2.01	Updated address.	_____
2.02	Updated phone number.	_____
3	Is there a current copy of each of the DWSP Plans on the premises of the water system? (If this is a transient non-community, they should have a copy of their assessment on the premises.)	☐ Yes ☐ No ☑ NA ☐ Unknown
4	**Are the following items in the Source Protection Plans kept up to date in order to show current conditions in the DWSP zones, including:**	
4.01	Is the inventory of potential contamination sources current?	☐ Yes ☐ No ☑ NA ☐ Unknown
4.02	Implementation of land management strategies in the recordkeeping section? The recordkeeping section must include copies of ordinances, codes, permits, public education programs, minutes of meetings, etc.	☐ Yes ☐ No ☑ NA ☐ Unknown
5	Are there any new sources for which a Preliminary Evaluation Report has not been submitted?	☐ Yes ☐ No ☑ NA ☐ Unknown
6	Are there any old sources that have come into use for which a DWSP Plan has not been submitted?	☐ Yes ☑ No ☐ NA ☐ Unknown
7	Has there been reconstruction or redevelopment of any ground-water source for which a revised DWSP Plan has not been submitted?	☐ Yes ☑ No ☐ NA ☐ Unknown

Sources / General

General:

1	Are there any undocumented source(s) physically connected to the drinking water system? (If source is not on system Inventory mark "yes")	☑ Yes ☐ No ☐ NA ☐ Unknown
Potential Deficiency	Notes: x plan was submitted but was rejected by the State.	

Sources / Groundwater

LONG VALLEY WEL - (Active) / Construction:

1	**The well casing does NOT extend a minimum of 18 inches above the finished ground surface or 12 inches above the well house floor? (Answer "No" if standard is met)**	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
1.01	Is the well site in a flood plain or area likely to be flooded?	☐ Yes ☐ No ☐ NA ☐ Unknown
2	Is the sanitary seal properly installed and maintained?	☑ Yes ☐ No ☐ NA ☐ Unknown
3	**Is there a pitless adapter?**	☑ Yes ☐ No ☐ NA ☐ Unknown
3.01	Does the pitless adapter appear to be water tight including the cap, cover, casing extension and other attachments?	☑ Yes ☐ No ☐ NA ☐ Unknown
4	**Is the well casing vented?**	☐ Yes ☑ No ☐ NA ☐ Unknown
4.01	Is the open end of the vent screened with a #14 mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.02	Is the open end of the vent down-turned?	☐ Yes ☐ No ☐ NA ☐ Unknown
4.03	Is the open end of the vent terminated with an appropriate air gap above the ground?	☐ Yes ☐ No ☐ NA ☐ Unknown
5	**Is there a pump to waste line from the well?**	☐ Yes ☑ No ☐ NA ☐ Unknown
5.01	Does the pump to waste line discharge through an approved air gap?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.02	Is the pump to waste line equipped with a #4 non-corrodible mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
5.03	Does the pump to waste line discharge to a sanitary sewer or storm sewer without proper local authorization?	☐ Yes ☐ No ☐ NA ☐ Unknown
6	Is there a means to measure drawdown?	☑ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
7	Is the wellhead properly secured against unauthorized personnel?	☑ Yes ☐ No ☐ NA ☐ Unknown

Sources / Groundwater

LONG VALLEY WEL - (Active) / Pumps:

1	Where does this pumping station pump from and to?	well to system to tank
2	What type of pump(s) are at this pumping station?	☐ CF - Centrifugal ☐ HP - Hand Pump ☐ JT - Jet ☐ PD - Positive Displacement ☐ SC - Screw ☑ SU - Submersible ☐ VT - Vertical Turbine
3	Is the building and equipment protected from flooding?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	What is the actual pumping capacity of this well in gallons per minute (GPM)?	0
5	Are cross-connections present in the well discharge piping?	☐ Yes ☑ No ☐ NA ☐ Unknown
6	Is adequate drainage provided?	☑ Yes ☐ No ☐ NA ☐ Unknown
7	Are toxic chemicals, hazardous or flammable materials or lubricants stored inside the pumping station?	☐ Yes ☑ No ☐ NA ☐ Unknown
8	**Is the pump discharge line equipped with:**	
8.01	Pump discharge piping: a smooth-nosed sampling tap?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.02	Pump discharge piping: a positive-acting check valve between the pump and the isolation valve?	☑ Yes ☐ No ☐ NA ☐ Unknown
8.03 **Potential Deficiency**	Pump discharge piping: pressure gauge?	☐ Yes ☑ No ☐ NA ☐ Unknown
8.04 **Potential Deficiency**	Pump discharge piping: flow meter?	☐ Yes ☑ No ☐ NA ☐ Unknown

Question Number		
8.05	Pump discharge piping: isolation gate valves?	☑ Yes ☐ No ☐ NA ☐ Unknown
9 Potential Deficiency	**Where a well pumps directly into a distribution system, is an air release valve or other means of releasing trapped air located on the pump discharge piping?**	☐ Yes ☑ No ☐ NA ☐ Unknown
9.01	Is the discharge line from the air release valve properly downturned?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.02	Is the open end of the air release valve screened with #14 mesh corrosion resistant mesh screen?	☐ Yes ☐ No ☐ NA ☐ Unknown
9.03	Is the open end of the air release valve terminated an appropriate air gap (minimum of 6 inches) above the ground or pumphouse floor?	☐ Yes ☐ No ☐ NA ☐ Unknown
10	Are the correct types of lubricant used (ANSI/NSF 60)?	☐ Yes ☐ No ☑ NA ☐ Unknown
11	Is rotating and electrical equipment provided with protective guards?	☑ Yes ☐ No ☐ NA ☐ Unknown

Storage / STORAGE FACILITY ST001 - (Active)

Design:

1	What is the name of this storage facility?	Long Valley Estates Reservoir
2	What is the total capacity for this storage facility in gallons?	37000
3	Is the area surrounding the ground-level storage structure graded in a manner that will prevent surface water from standing within 50 feet of it?	☑ Yes ☐ No ☐ NA ☐ Unknown
4	Does the storage reservoir have a watertight roof?	☑ Yes ☐ No ☐ NA ☐ Unknown
5	Is the storage reservoir cover sloped so that water will drain?	☑ Yes ☐ No ☐ NA ☐ Unknown

Storage / STORAGE FACILITY ST001 - (Active)

Components:

1	Does the water storage structure have ladders, ladder guards, balcony railings, and safely located entrance hatches provided where applicable?	☑ Yes ☐ No ☐ NA ☐ Unknown
2	**Are overflow pipes present?**	☑ Yes ☐ No ☐ NA ☐ Unknown
2.01	Overflow pipes: Terminated 12 to 24 inches above the ground?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.02	Overflow pipes: Screened with #4 mesh non-corrodible screen?	☑ Yes ☐ No ☐ NA ☐ Unknown
2.03	Overflow pipes: Directly connected to a storm sewer or sanitary sewer?	☐ Yes ☑ No ☐ NA ☐ Unknown
3	**Are air vents present?**	☑ Yes ☐ No ☐ NA ☐ Unknown
3.01	Air Vents: Turned downward or covered from rain and dust?	☑ Yes ☐ No ☐ NA ☐ Unknown
3.02	Air Vents: Terminated at a minimum of 24 to 36 inches above the surface of the storage tank roof?	☑ Yes ☐ No ☐ NA ☐ Unknown
3.03	Air Vents: Screened with #14 non-corrodible mesh screen with a larger guage protection screen (e.g., #4)?	☑ Yes ☐ No ☐ NA ☐ Unknown
4	**Are access openings present?**	☑ Yes ☐ No ☐ NA ☐ Unknown
4.01	Access opening covers at least 4 inches above the tank roof surface (18 inches above any earthen cover)?	☑ Yes ☐ No ☐ NA ☐ Unknown
4.02	Access openings: Is the lid properly gasketed?	☐ Yes ☑ No ☐ NA ☐ Unknown
4.03	Access openings: Is the access of the shoe box type with a minimum of a 2 inch overlap?	☑ Yes ☐ No ☐ NA ☐ Unknown

Question Number		
8	Are outside access hatches locked? Notes: x no lock and need to manufacture a bar for the lock.	☐ Yes ☑ No ☐ NA ☐ Unknown
9	Are there any roof penetrations that are not sealed? (ie: a water level indicator cable)	☐ Yes ☑ No ☐ NA ☐ Unknown
10	If a drain line is present, is it properly screened with #4 mesh non-corrodible screen? Notes: x found the drain line with o screen but flushed and repaired during the survey	☑ Yes ☐ No ☐ NA ☐ Unknown
11	If a drain line is present, does it discharge through a physical air gap of at least 2 pipe diameters?	☑ Yes ☐ No ☐ NA ☐ Unknown

Storage / STORAGE FACILITY ST001 - (Active)

Maintenance:

1	**Are there cracks in the walls or covers of the storage tanks?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Does the tank exterior show evidence of mild delerioration or spalding? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.02	Does the tank exterior show evidence of moderate deterioration or spalding? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.03	Does the tank show evidence of water leakage such as water marks or stains? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.04	Is the tank leaking? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
1.05	Is there evidence of possible water intrusion into the tank through cracks or other openings? (Answer only once in this section)	☐ Yes ☐ No ☐ NA ☐ Unknown
2	Is the storage structure interior coating or liner peeling or cracked?	☐ Yes ☑ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Design

1	Do all water mains (installed after 1995) that provide fire flow have a diameter of at least 8 inches? (If no new lines have been added after 1995 answer "yes")	☐ Yes ☐ No ☑ NA ☐ Unknown

Question Number		
2	**Was asbestos/cement pipe used in the system?**	☐ Yes ☑ No ☐ NA ☐ Unknown
2.1	Has an asbestos analysis been done?	☐ Yes ☐ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Pressure/Flow

1	Is the PWS capable of providing sufficient water during maximum hourly demand conditions to maintain a minimum pressure of 20 psi within the system measured at all points of connections during normal system operation?	☑ Yes ☐ No ☐ NA ☐ Unknown
2	**Was the system constructed or new portions added after January 1, 2007.**	☐ Yes ☐ No ☑ NA ☐ Unknown
2.01	Does the system maintain at all points of connection the following pressures: (a) 20 psi during conditions of fire flow and fire demand experienced during peak day demand; (b) 30 psi during peak instantaneous demand; and (c) 40 psi during peak day demand.	☐ Yes ☐ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Air & Vacuum Release Valves

1	**Are air and vacuum release valves used in the system?**	☑ Yes ☐ No ☐ NA ☐ Unknown
1.01	Is the vent line properly screened (#14 mesh) and down turned?	☑ Yes ☐ No ☐ NA ☐ Unknown
1.02	Does the discharge piping on all air relief valves extend a proper distance above ground and flood level?	☑ Yes ☐ No ☐ NA ☐ Unknown
1.03	Does the valve chamber have a drain or adequate sump?	☑ Yes ☐ No ☐ NA ☐ Unknown
1.04	Does the valve chamber show evidence of flooding?	☐ Yes ☑ No ☐ NA ☐ Unknown
1.05	Is the chamber flooded at the time of the inspection?	☐ Yes ☑ No ☐ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Cross-Connections

1	**Does any portion of the distribution system cross under any surface water body?**	☐ Yes ☑ No ☐ NA ☐ Unknown
1.01	Were all the following precautions taken? A min. of 2 ft of cover over the pipe; and if the crossing is greater than 15 ft: special construction with restrained joints; valves at each side for pipeline isolation; and permanent taps to allow leakage testing.	☐ Yes ☐ No ☐ NA ☐ Unknown
3	Does the water system have a program to control the use of fire hydrants?	☐ Yes ☐ No ☑ NA ☐ Unknown
4	Are blow offs connected to sanitary or storm sewers or do they exit below flood level in ditches or streams?	☐ Yes ☐ No ☑ NA ☐ Unknown

DISTRIBUTION SYSTEM - (Active) / Disinfection

1	Does your water facility disinfection procedures meet the AWWA C-601, 602, 651, 652 Standards for disinfection?	☑ Yes ☐ No ☐ NA ☐ Unknown

ATTACHMENT C

Annual bacteriological summaries for calendar years 2004, 2005, 2006 and year to date 2007. Sample results indicate positive coliform samples occurred each year.

Utah Department of Environmental Quality
Division of Drinking Water
Annual TCR Summary

For the 12 months beginning 1/1/2007

PWS ID: UTAH13050 **Name:** LONG VALLEY ESTATES

Legal Contact LONG VALLEY ESTATES
LYNN OVERTREE

Address: 610 SAN MIGUEL CAN RD
ROYAL OAKS, CA 95076-9024

Phone Number: 435-224-5059

City Served (Area):

County: KANE COUNTY

Rating: Not Approved
Rating Date: 6/28/06

					Gal/Day	Gal/Min
System Type:	Non-community	**Last Inv Update:**	2/1/07	**Avg Daily Prod:**	0	0
Activity Status Cd:	Active	**Last Snty Srv Dt:**	6/5/2007	**Total Dsgn Cap:**	0	0
Population:	25	**Oper Period:**	5/1 to 10/31	**Total Emerg Cap:**	0	0

Routine Bacteriological Sampling Requirements

Samples Required	Requirement Started*	Requirement End*
1 / Quarter	7/1/2006	

Total Coliform Sample History

For the twelve months beginning 1/1/2007

	Routine Samples			Repeat Samples			Investigative Samples			
	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	Other
Jan	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0
Mar	1	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0
Jun	1	0	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0
Sep	1	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0

Utah Department of Environmental Quality
Division of Drinking Water
Annual TCR Summary

For the 12 months beginning 1/1/2006

PWS ID: UTAH13050 ***Name:*** LONG VALLEY ESTATES

Legal Contact LONG VALLEY ESTATES
LYNN OVERTREE

Rating: Not Approved
Rating Date: 6/28/06

Address: 610 SAN MIGUEL CAN RD
ROYAL OAKS, CA, 95076-9024

Phone Number: 435-224-5059

City Served (Area):

County: KANE COUNTY

					Gal/Day	Gal/Min
System Type:	Non-community	***Last Inv Update:***	2/1/07	***Avg Daily Prod:***	0	0
Activity Status Cd:	Active	***Last Snty Srv Dt:***	6/5/2007	***Total Dsgn Cap:***	0	0
Population:	25	***Oper Period:***	5/1 to 10/31	***Total Emerg Cap:***	0	0

Routine Bacteriological Sampling Requirements

Samples Required	*Requirement Started**	*Requirement End**
1 / Quarter	7/1/2006	

Total Coliform Sample History

For the twelve months beginning 1/1/2006

	Routine Samples			Repeat Samples			Investigative Samples			
	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	Other
Jan	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0

Utah Department of Environmental Quality
Division of Drinking Water
Annual TCR Summary

For the 12 months beginning 1/1/2005

PWS ID: UTAH13050 ***Name:*** LONG VALLEY ESTATES

Legal Contact LONG VALLEY ESTATES
LYNN OVERTREE

Rating: Not Approved
Rating Date: 6/28/06

Address: 610 SAN MIGUEL CAN RD
ROYAL OAKS, CA 95076-9024

Phone Number: 435-224-5059

City Served (Area):

County: KANE COUNTY

					Gal/Day	Gal/Min
System Type:	Non-community	***Last Inv Update:***	2/1/07	***Avg Daily Prod:***	0	0
Activity Status Cd:	Active	***Last Snty Srv Dt:***	6/5/2007	***Total Dsgn Cap:***	0	0
Population:	25	***Oper Period:***	5/1 to 10/31	***Total Emerg Cap:***	0	0

Routine Bacteriological Sampling Requirements

Samples Required	*Requirement Started**	*Requirement End**
1 / Quarter	7/1/2006	

Total Coliform Sample History

For the twelve months beginning 1/1/2005

	Routine Samples			Repeat Samples			Investigative Samples			
	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos	Fec Pos	Other
Jan	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0

Utah Department of Environmental Quality
Division of Drinking Water
Annual TCR Summary

For the 12 months beginning 1/1/2004

PWS ID: UTAH13050 **Name:** LONG VALLEY ESTATES

Legal Contact LONG VALLEY ESTATES
LYNN OVERTREE

Address: 610 SAN MIGUEL CAN RD
ROYAL OAKS, CA 95076-9024

Phone Number: 435-224-5059

City Served (Area):

County: KANE COUNTY

Rating: Not Approved
Rating Date: 6/28/06

					Gal/Day	Gal/Min
System Type:	Non-community	**Last Inv Update:**	2/1/07	**Avg Daily Prod:**	0	0
Activity Status Cd:	Active	**Last Snty Srv Dt:**	6/5/2007	**Total Dsgn Cap:**	0	0
Population:	25	**Oper Period:**	5/1 to 10/31	**Total Emerg Cap:**	0	0

Routine Bacteriological Sampling Requirements

Samples Required	Requirement Started*	Requirement End*
1 / Quarter	7/1/2006	

Total Coliform Sample History

For the twelve months beginning 1/1/2004

	Routine Samples			Repeat Samples			Investigative Samples			
	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	No Samp	TC Pos.	Fec Pos.	Other
Jan	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0